XR-1700

SERVICE MANUAL

E Model

Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MG-707DVS-35

SPECIFICATIONS

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	30 W × 2ch (20 W × 4ch) (at 4 ohms)

Cassette player section

Tape track	4-track 2-channel stereo
Frequency response	40 – 15,000 Hz
Signal-to-noise ratio	55 dB
Wow and flutter	0.13% (WRMS)

Tuner section

FM

Tuning range	FM tuning interval: 50 kHz/200 kHz switchable 87.5 – 108.0 MHz (at 50 kHz step) 87.5 – 107.9 MHz (at 200 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	13 dBf (75 ohms)
Selectivity	65 dB at 400 kHz
Signal-to-noise ratio	63 dB (stereo), 65 dB (mono)
Harmonic distortion at 1 kHz	0.9% (stereo), 0.5% (mono)
Separation	30 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	3 dB

AM

Tuning range	AM tuning interval: 9 kHz/10 kHz switchable 531 – 1,602 kHz (at 9 kHz step) 530 – 1,710 kHz (at 10 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	450 kHz
Sensitivity	32 µV

General

Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Loudness	+10 dB at 100 Hz +8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 × 50 × 170 mm (w/h/d), not incl. projecting parts and controls
Mounting dimensions	Approx. 182 × 53 × 150 mm (w/h/d), not incl. projecting parts and controls
Mass	Approx. 1.2 kg
Accessories supplied	Mounting hardware (1 set) Power connecting cord (1)

Design and specifications subject to change without notice.

FM/AM CASSETTE CAR STEREO

SONY®

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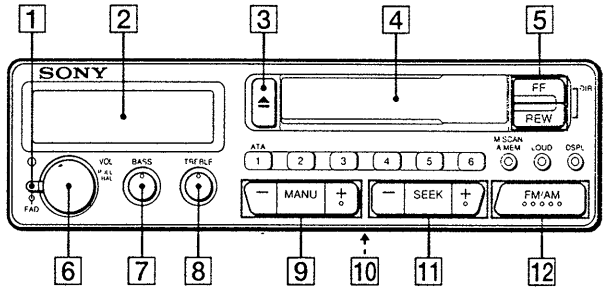
Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Location and Function of Controls



1 FAD (fader) control
Turn clockwise to decrease the volume of the rear speakers or counterclockwise to decrease the volume of the front speakers.

2 Display window

3 EJECT button
Press to stop tape playback and to eject the cassette.

4 Cassette insertion door

5 FF/REW (fast-winding)/DIR (tape transport direction change) buttons
During playback, press REW or FF for fast winding, or press both REW and FF simultaneously to listen to the other side of the cassette.

6 POWER (power on/off) switch/VOL (volume)/PULL BAL (balance) control

POWER switch	Turn clockwise to turn on the unit and counterclockwise to turn off.
VOL control	Turn clockwise to increase volume and counterclockwise to decrease.
PULL BAL control	Pull and turn to adjust the balance of the left and right speakers.

7 BASS control
Turn clockwise to increase and counterclockwise to decrease the bass. It can be locked in the neutral position.

8 TREBLE control
Turn clockwise to increase and counterclockwise to decrease the treble. It can be locked in the neutral position.

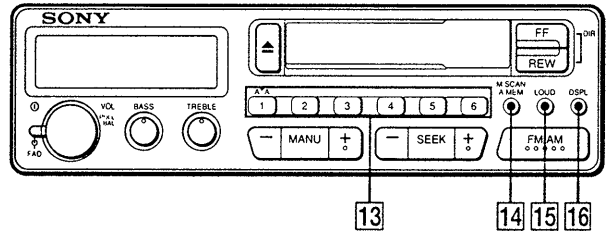
9 MANU (manual tuning) button

10 Frequency select switch (located on the bottom of the unit)
See "Frequency Select Switch" in the Installation/Connections manual.

11 SEEK (automatic tuning) button

12 FM/AM (band select) button
Each time the button is pressed, the band changes in order of:

→ FMI → FMII → FMIII → AM →



13 Preset number buttons

	During tape playback	During radio reception
ATA 1 button	**ATA (Automatic Tuner Activation) button** Press to make the tuner turn on automatically every time you fast-wind a tape. To cancel, press it once more.	**Preset number buttons**
2 button	—	
3 button	—	
4 button	—	
5 button	—	
6 button	—	

14 M.SCAN (Memory Scan)/A.MEM (Automatic Memory) button

15 LOUD (loudness) button
Press to reinforce bass and treble especially when listening at a low volume level. To cancel the mode, press it once more.

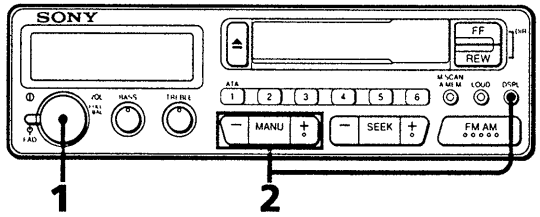
16 DSPL (display change/time set) button
Each time the button is pressed, the display on the display window changes as follows:

During Tape playback	Clock (Frequency → Clock)*
During Radio reception	Frequency → Clock

* While the ATA function is activated.

This section is extracted from instruction manual.

Setting the Clock



The clock has a 12-hour digital indication.

For example, to set it to 10:08.

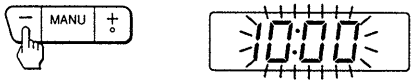
1 **Turn clockwise to turn the power on.**

2 **Press the DSPL button and hold it down.**
The indication starts to blink after two seconds.

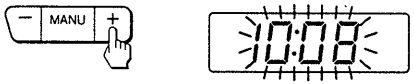
DSPL

With the DSPL button held down, proceed with the following:

Press the − button to set the hour digits.



Press the + button to set the minute digits.

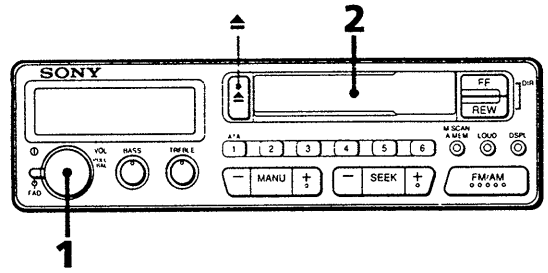


3 **The clock starts activating when you take your finger off the DSPL button.**

When setting the time digits

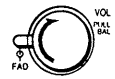
- Minute and hour digits do not go backward.
- "00" comes after "59". The hour digits do not change then.

Listening to the Tape Playback

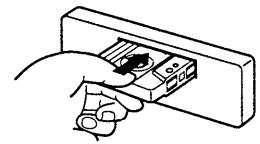


Before inserting a cassette, take up any slack in the tape with a thick pencil.

1 **Turn clockwise to turn the power on.**



2 **Insert a cassette.**
Playback starts automatically.



To listen to the reverse side of the cassette,

press FF **and** REW **simultaneously.**

To Eject the Cassette and Listen to the Radio

Press the ⏏ button.

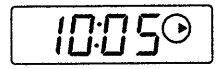
To Wind the Tape Rapidly

Direction indicator	To advance	To rewind
◄ or ►	press FF.	press REW.

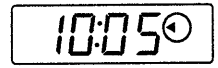
To resume playback, press REW or FF (that one which is not depressed) lightly.

Note
Before turning off the unit; eject the tape to avoid tape damage.

Tape transport direction indication.

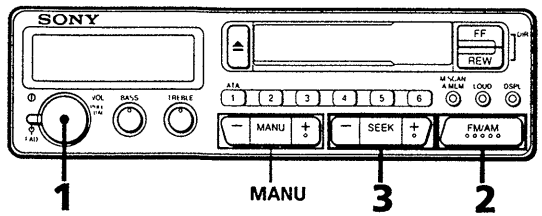


The side facing up is being played back.



The side facing down is being played back.

Tuning in a Station



Searching for the Stations Automatically — Automatic Tuning

1 Turn clockwise to turn the power on.

2 Press to select the desired band, FMI, FMII, FMIII or AM.

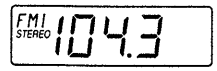
FM/AM

3 Press either side of the SEEK button.

For lower frequencies — For higher frequencies

The scanning stops when a station in received. Press either side of the button repeatedly until the desired station is received.

When an FM stereo program with a sufficient signal strength is tuned in



The "STEREO" indication appears.

To play back a cassette during radio reception

Insert a cassette. The radio will be turned off and playback will start automatically.

Tuning in by Adjusting the Frequency — Manual Tuning

Select the desired band, then press either side of the MANU button.

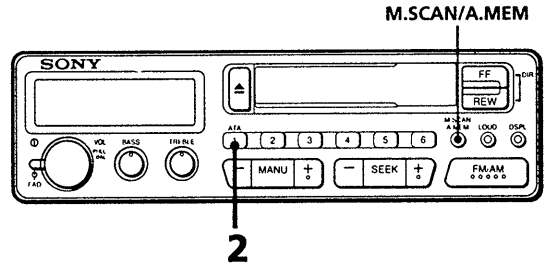
For lower frequencies — For higher frequencies

Release the button when the desired station is received.

PREVENTING ACCIDENTS!

While you are driving, the use of Automatic Tuning and the Memory Preset Tuning is recommended instead of the Manual Tuning.

Using the Memory Preset Tuning



Up to 6 stations on each band (FMI, FMII, FMIII and AM) can be stored on the preset number buttons in order of your choice.

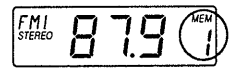
Memorizing Only the Desired Stations

For example, store a station on the preset number button 1.

1 Tune in a desired station.
Using automatic or manual tuning (page 8).

2 Keep the preset number button pressed for about two seconds until the "MEM" indication comes on in the display window.

ATA
1



Repeat the same procedure to store other stations.

Only one station per band (FMI, FMII, FMIII and AM) can be stored in the memory on each preset number button.
If you try to store another station on the same preset number button, the previously stored station will be erased.

When the "MEM" indication comes on, the station is stored in the memory and the operation is completed. The "MEM" indication goes off after a while.

Receiving the Memorized Stations

Select the desired band. Press the desired preset number button lightly.

ATA
1 —— 6

Note
If you keep pressing the preset number button for more than two seconds, the currently received station will be memorized again. To receive the previously memorized station, make sure that the preset number button is pressed only lightly.

Checking What is Being Broadcasted on the Preset Stations — Memory Scan Function

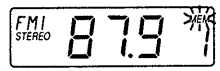
Select the desired band. Press the M.SCAN/A.MEM button lightly.

Each memorized station will be scanned for five seconds in order. (When the broadcast signal of the memorized station is too weak, it cannot be received.)

Note
If the M.SCAN/A.MEM button is kept pressed, the button will function as the A.MEM (automatic memory) button and the memories of the currently received station and the memories of the succeeding preset number buttons will be altered.

Memorizing the Stations Automatically — Automatic Memory Function

Select the desired band. Press the M.SCAN/A.MEM button until the "MEM" indication starts flashing.



The unit will start scanning the selected band and memorizes the tuned stations on the preset number buttons 1 through 6 automatically.

Installation

Precautions

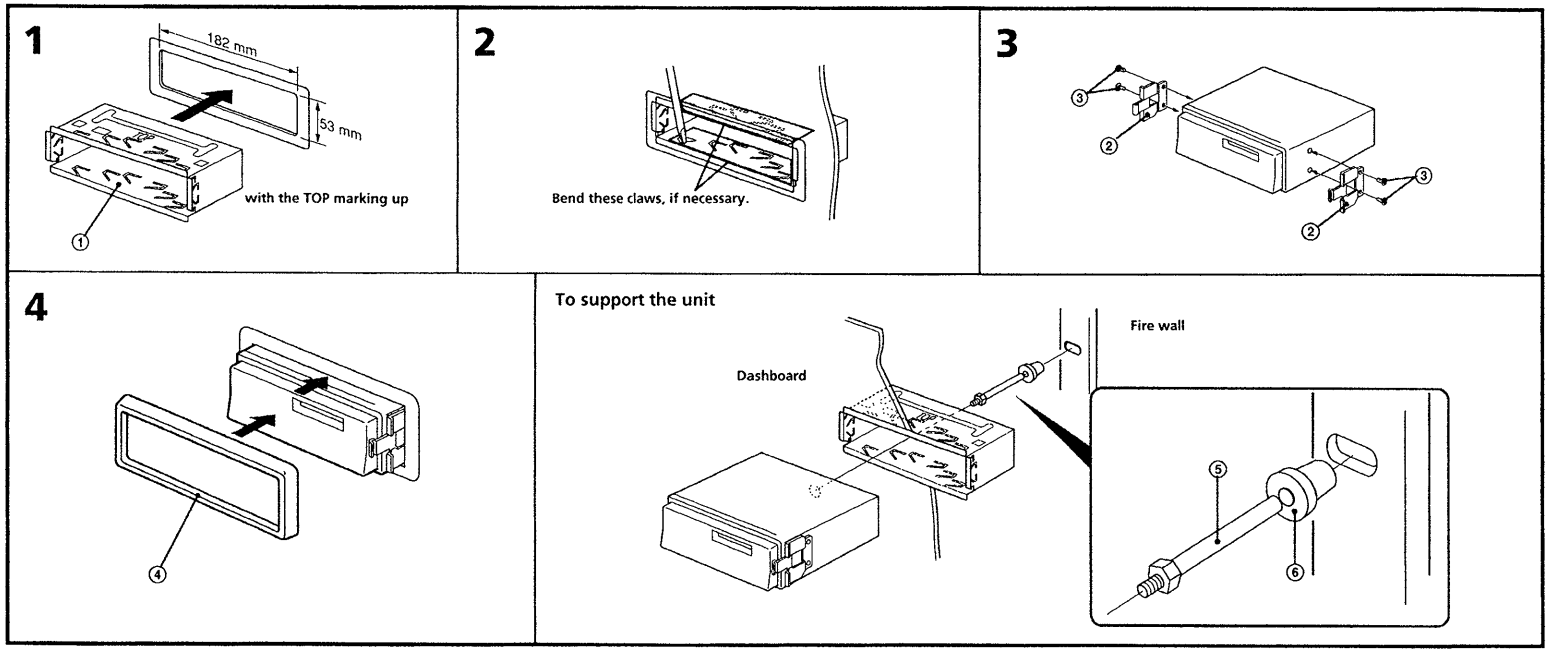
- Choose the installation location carefully so that the unit will not hamper the driver during driving.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for a safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 20°.

Mounting Example

Installation in the dashboard



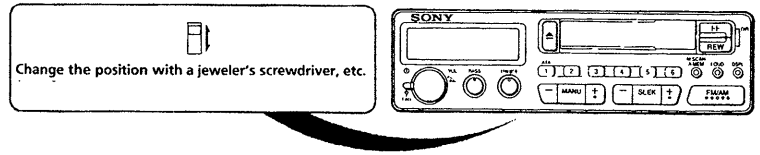
Connections

Caution

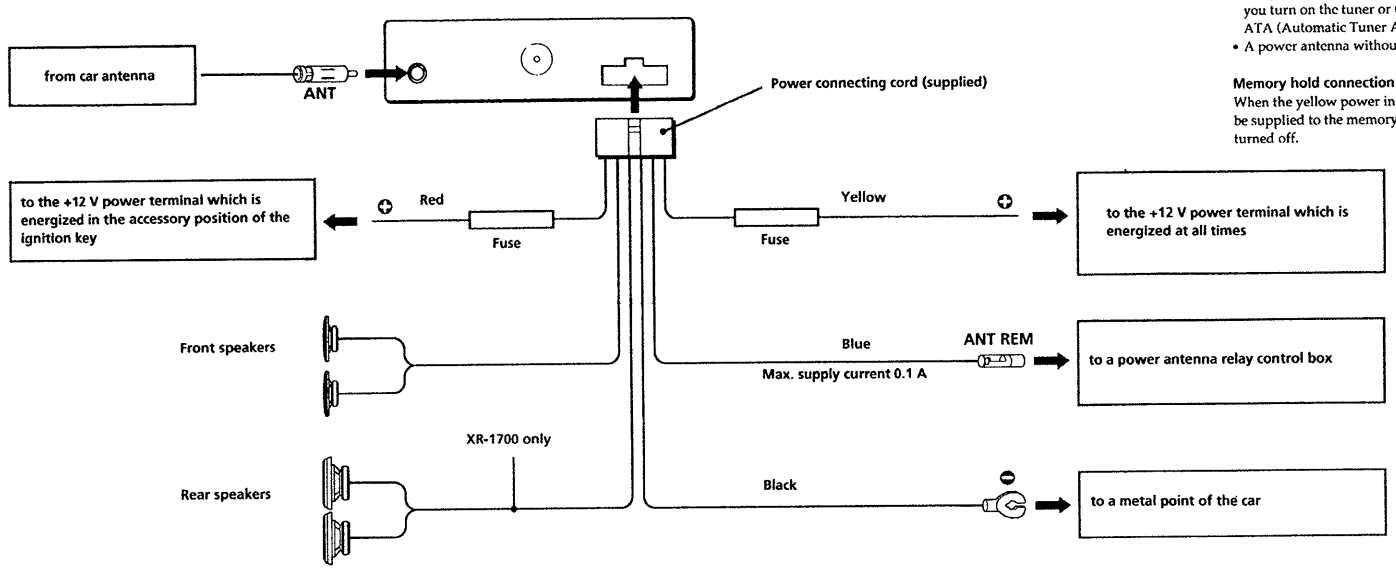
- This unit is designed for negative ground 12 V DC operation only.
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the **yellow** and **red** power input leads only after all other leads have been connected.
- Be sure to connect the red power input lead to the positive 12 V power terminal which is energized when the ignition key is in the accessory position.
- **Run all ground wires to a common ground point.**

Frequency Select Switch

The AM (FM) tuning interval is factory-set to the 9K (50K)position. If the frequency allocation system of your country is based on 10 kHz (200 kHz) interval, set the switch on the bottom of the unit to the 10K (200K) position before making connections.



Connection Example



Notes on the control leads

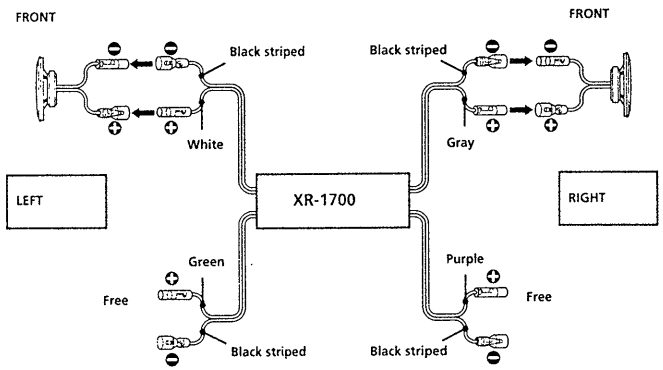
- The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner or (XR-1700 only) when you activate the ATA (Automatic Tuner Activation) function.
- A power antenna without relay box cannot be used with this uni

Memory hold connection

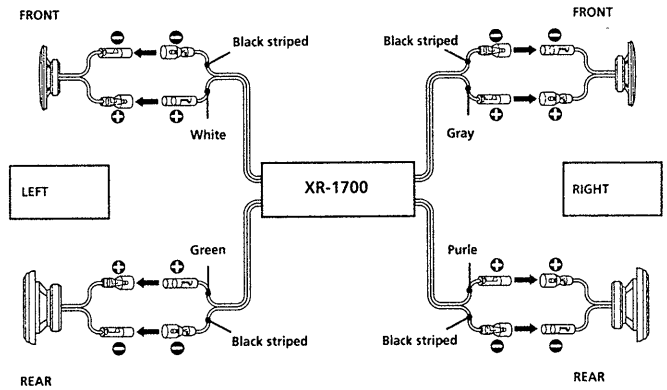
When the yellow power input lead is connected, power will alway be supplied to the memory circuit even when the ignition key is turned off.

Speaker Connections

2-speaker connection



4-speaker connection



Notes on speaker connection

- Before connecting the speakers, turn the unit off.
- Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities.
  Otherwise, the speakers may be damaged.
- Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.
- Do not connect the speakers in parallel.
- Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit.
  Doing so may damage the active speakers. Therefore, be sure to connect passive speakers to these terminals.

SECTION 2
EXPLANATION OF IC TERMINALS

IC701 μPD1723GF-628-3BE

Pin No.	Port No.	Pin name	I/O	Description
1	NC	–	–	This unit is connected to +5V.
2, 3	E01, E02	–	O	PLL error output terminal.
4	$V_{DD}1$	–	I	Device power supply terminal.
5	VCOL	AM OSC	I	Input terminal for AM section.
6	VCOH	FM OSC	I	Input terminal for FM section.
7	CE	–	I	Input terminal for device selection signal.
8	$V_{DD}2$	–	I	Device power supply terminal.
9	PD1	SCAN	O	Output high during SEEK when tuner is ON.
10	PD2	LOCAL	O	Output high when local is ON and low the tuner is OFF.
11	PD3	PTAPE	O	Output terminal for power supply of the tape mechanism deck.
12	PC0	SIG0	O	Not used.
13 14	PC1 PC2	SIG1 SIG2	O	Output for signal switching (source) SIG1 / SIG2 L / L : AUX H / L : TAPE L / H : AM H / H : FM
15	PC3	MUTE	O	Mute output.
16	PA0	AM IF	I	Input for IF count of AM.
17	PA1	FM IF	I	Input for IF count of FM.
18	PA2	$\overline{MONO}/\overline{ST}$	O/I	Forced monaural output and stereo input. Forced monaural ON (during FM reception) and outputs low at all times besides during FM reception. Becomes input mode during forced monaural OFF (during FM reception). (STEREO is displayed at low input)
19	PA3	LOUD	O	Output high if LOUD is ON when the power is turned ON. (besides all OFF.)
20	PB0	$\overline{AMS}$	O	Output low at AMS ON during tape ON. Output high at tuner and AUX ON. (not used)
21	PB1	METAL	O	Output high at METAL ON during tape ON. Output low at tuner and AUX ON. (not used)
22	PB2	DOLBY	O	Output low at DOLBY ON during tape ON. Output high at tuner and AUX ON. (not used)
23	PB3	POWER	O	Output high if AUX, tuner, tape is ON. Output low when all is OFF. (not used)
24	XO	–	O	Connection terminal for liquid crystal oscillation element. (4.5MHz)
25	XI	–	I	
26	GND	–	–	Ground terminal for device.
27	CGP	BEEP/COLOR	O	Not used.
28 – 39	LCD27 – LCD16	–	O	Output terminal for LCD panel segment signal.
40 – 55	LCD15/KS15 – LCD0/KS0	–	O	Output terminal for LCD panel segment signal and output terminal for key source signal.
56, 57	COM1, COM2	–	O	Output terminal for LCD panel common signal
58	GND	–	–	Ground terminal for device.
59 – 62	K3 – K0	–	I	Input termial for key return signal.
63	SD	–	I	Electric field input terminal. Used for SD detection.
64	$\overline{INT}$	BU CHECK	I	CE and BUCHECK OFF.

SECTION 3
ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENT

PRECAUTION

1. Wipe the following components with an absorbent cotton cloth moistened with alcohol before adjustment :
   PB head　　Pinch roller
   Idler　　Rubber belt
   Capstan
2. Demagnetize the PB head using a head demagnetizer.
3. Be careful not to use a magnetized screwdriver.
4. After adjustment is completed, lock the adjustment parts using screws.
5. Unless otherwise specified, make adjustments at the specified voltage (14.4V).

Torque Measurement

Measure the torque at a supply voltage of 14.4V DC.

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	35 – 65 g•cm (0.49 – 0.90 oz•inch)
FWD Back Tension		1.5 – 6 g•cm (0.02 – 0.08 oz•inch)
REV	CQ-102RC	35 – 65 g•cm (0.49 – 0.90 oz•inch)
REV Back Tension		1.5 – 6 g•cm (0.02 – 0.08 oz•inch)
FF, REW	CQ-210B	70 – 160g•cm (0.98 – 2.22 oz•inch)

3-2. ELECTRICAL ADJUSTMENTS

DECK SECTION

1. The adjustments should be performed in the order given in this service manual.
2. The adjustments should be performed for both L-CH and R-CH.

Test Tape

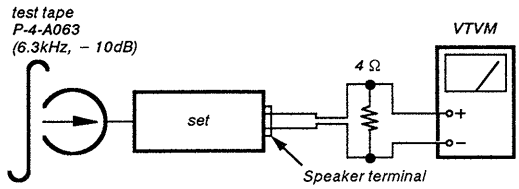
Type	Signal	Used for
P-4-A063	6.3kHz, – 10dB	Head azimuth Adjustment
WS-48A	3kHz, 0dB	Tape Speed Adjustment

0 dB=0.775V

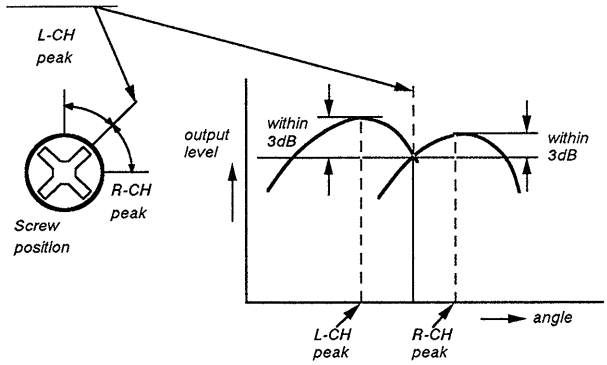
PB Head Azimuth Adjustment

Procedure :

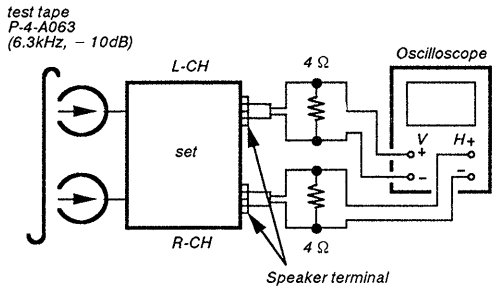
1. Put the set into the FWD PB mode.

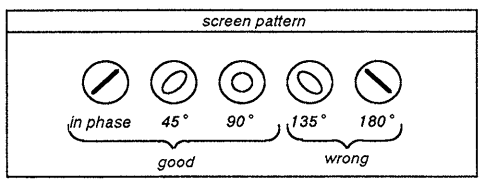


2. Turn the screw and check the output peak value. Adjust the screw so that the peak value in channels L and R coincides within 3dB.



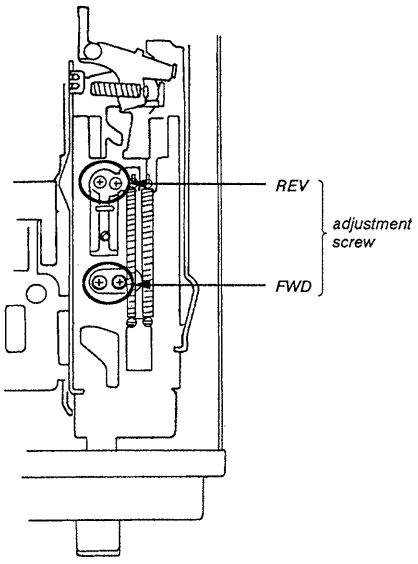
3. Check the phases in the PB mode





4. Repeat the above adjustment for the PB REV mode.
5. After the adjustment, lock the screw with locking compound.

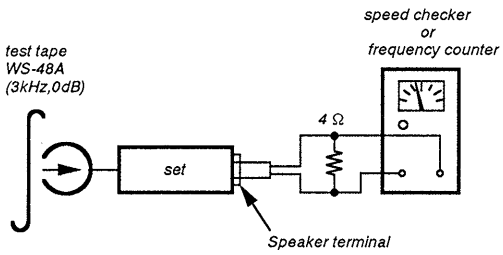
Adjustment Location :



Capstan Motor Tape Speed Adjustment

Procedure :

1. Put the set into the FWD PB mode.

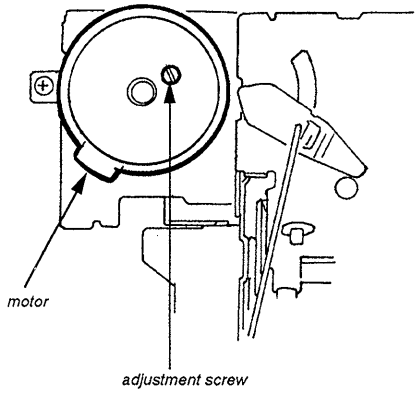


Specification : Constant speed

Speed checker	Frequency counter
± 0.65%	2,980 to 3,020 Hz

Adjust so that the frequency difference between the FWD and REV modes is within 1.5%.

Adjustment Location :



TUNER SECTION

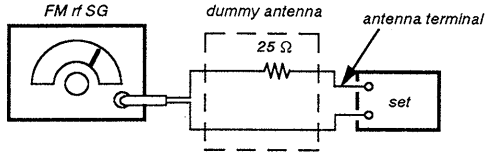
Cautions during repair
When the front end is defective, replace it by a new one because its internal block is difficult to repair.

0dB=1 μV

FM Auto-Scan Stop Level Adjustment

Note : Be sure to perform this adjustment before "AM Auto-scan Stop Level Adjustment"

Setting :
FM/AM button : FM
200k/50k (SW1) : 200k (Hz)

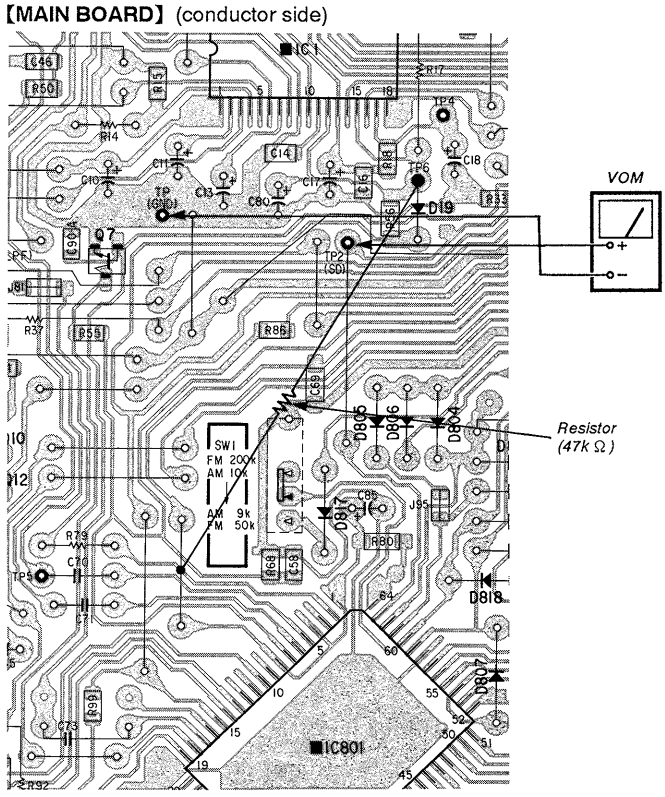


Carrier frequency : 98.1MHz
Output level : 23dB (14 μV)
Modulation : 1kHz, 75kHz deviation (100%)

Procedure :

1. Using a resistor (47k Ω), connect TP6 and +5V (IC801 ④ pin).
2. Tune the set to 98.1MHz.
3. Adjust SVR5 at the point where the VOM reading changes from low to high. (around 2 – 3V)
4. After adjustment is completed remove the resistor (47k Ω)

【MAIN BOARD】 (conductor side)



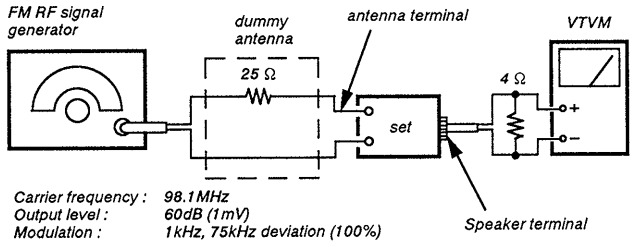
Adjustment Location : Main board

FM Discriminator Adjustment

Setting :

FM/AM button : FM

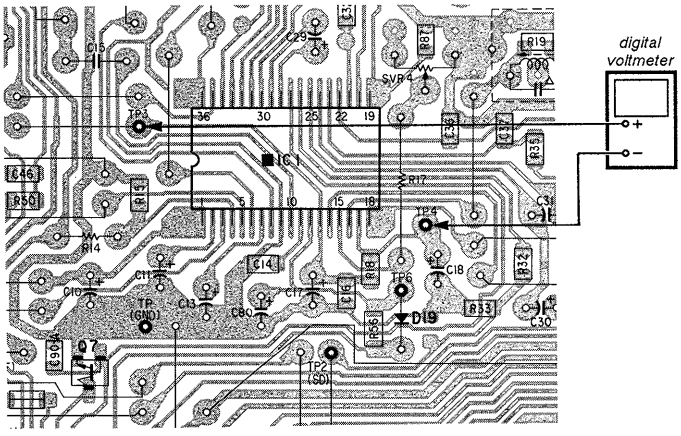
200k/50k (SW1) : 200k (Hz)



Procedure :

1. Tune the set to 98.1MHz.
2. Adjust T401, L6 for a maximum reading on VTVM.
3. Adjust L6 for a 0 ± 20mV reading on digital voltmeter.

【MAIN BOARD】 (conductor side)



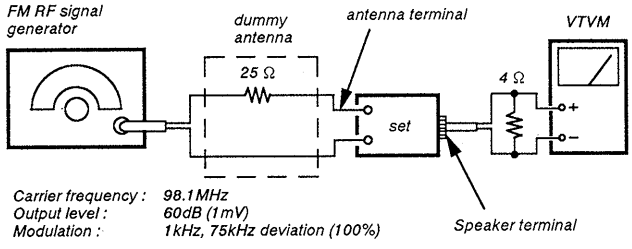
Adjustment Location : Main board (L6)
FE1 (T401)

Limiter Sens Adjustment

Setting :

FM/AM button : FM

200k/50k (SW1) : 200k (Hz)



Procedure :

1. Tune the set to 98.1MHz.
2. Input a 60dB signal from FM RF SG, when read the output of the speaker terminal to AdB.
3. Change the output of FM RF SG so that output of the speaker terminal to A − 3dB.
4. Confirm that the output of FM RF SG becomes within 21dB.
5. Adjust the SVR4 and repeat the steps 3 − 4.

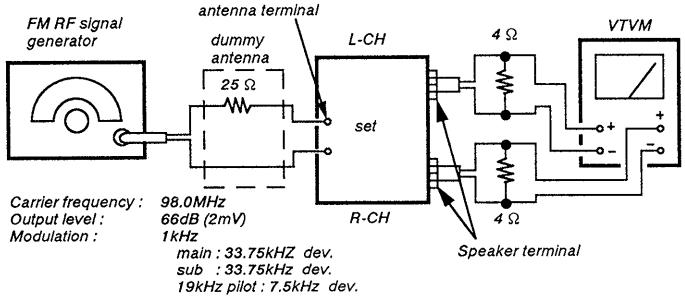
Adjustment Location : Main board

FM Stereo Separation Adjustment

Setting :

FM/AM button : FM

200k/50k (SW1) : 200k (Hz)



Procedure :

1. Fully turn SVR2 counterclockwise.

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust SVR3 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust SVR3 for minimum reading.

L-CH Stereo separation : Ⓐ − Ⓑ

R-CH Stereo separation : Ⓒ − Ⓓ

The separations of both channels should be equal.

2. Adjust so that separation is maximized.
3. Set the output level of a signal generator to 32dB (39.8 μV/m) and adjust SVR2 so that separation is 10dB ± 5.0dB.

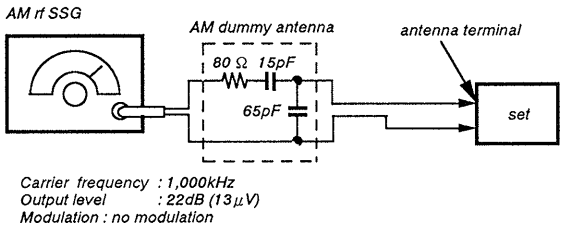
Adjustment Location : Main board

AM Auto-Scan Stop Level Adjustment

Note : Be sure to perform this adjustment before "FM Auto-scan Stop Level Adjustment"

Setting :

FM/AM button : AM
10k/9k (SW1) : 10k(Hz)

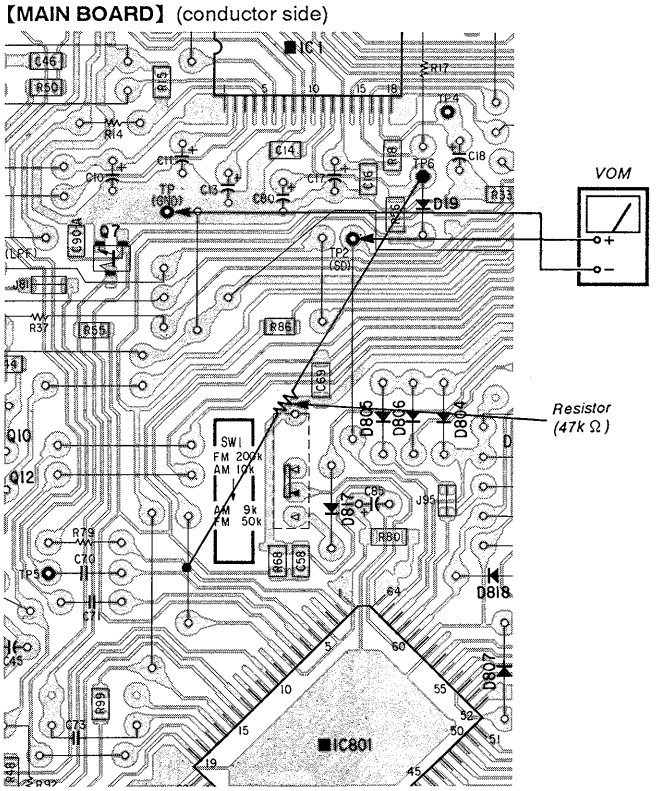


Carrier frequency : 1,000kHz
Output level : 22dB (13μV)
Modulation : no modulation

Procedure :

1. Using a resistor (47k Ω), connect TP6 and +5V (IC801 ④ pin).
2. Tune the set to 1,000kHz.
3. Adjust SVR1 at the point where the VOM reading changes from low to high. (around 2 – 3V)
4. After adjustment is completed remove the resistor (47k Ω) .

【MAIN BOARD】 (conductor side)



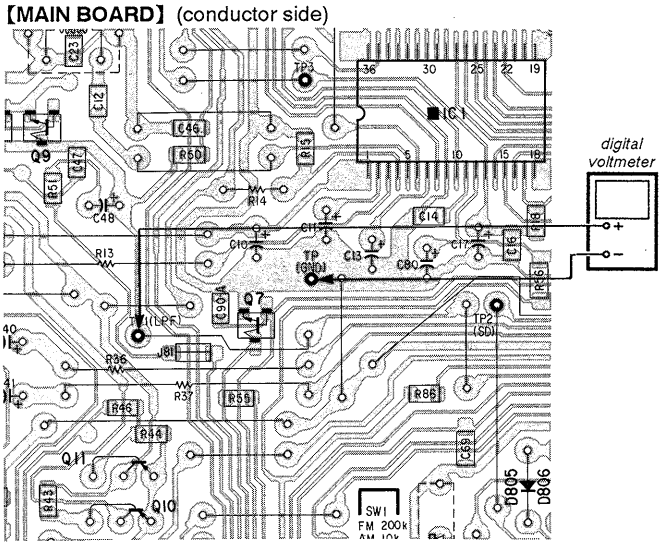
Adjustment Location : Main board

AM OSC Voltage Adjustment

Setting :

FM/AM button : AM
10k/9k (SW1) : 10k (Hz)

【MAIN BOARD】 (conductor side)



Procedure :

1. Tune the set to 530kHz.
2. Adjust L4 for 1.2V reading on digital voltmeter.

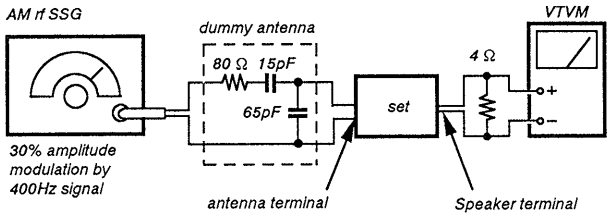
Adjustment Location : Main board

AM Tracking Adjustment

Setting :

FM/AM button : AM

10k/9k (SW1) : 10k (Hz)



Procedure :

AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L2, 3	600kHz
L5	1,000kHz

Adjustment Location : Main board

System Clock Adjustment

Setting :

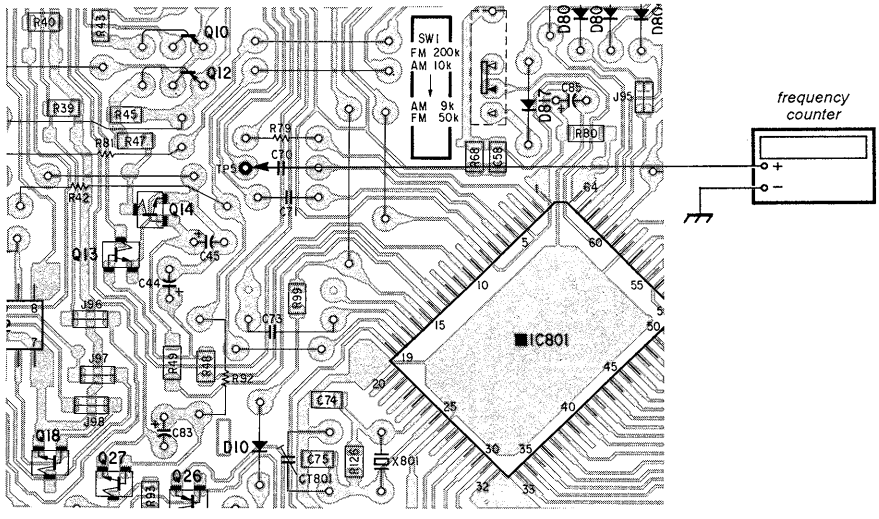
FM/AM button : AM

10k/9k (SW1) : 10k (Hz)

Procedure :

1. Tune the set to 530kHz.
2. Adjust CT801 for 980.000 ± 0.020kHz reading on frequency counter.

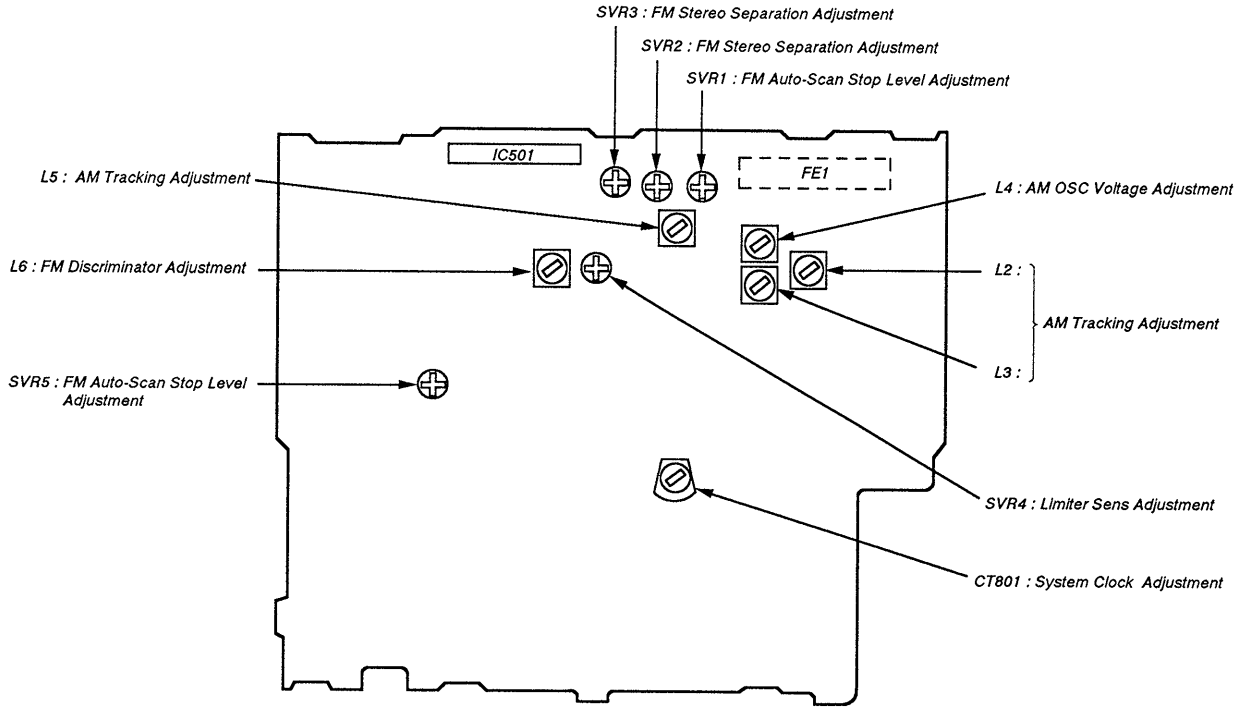
【MAIN BOARD】 (conductor side)

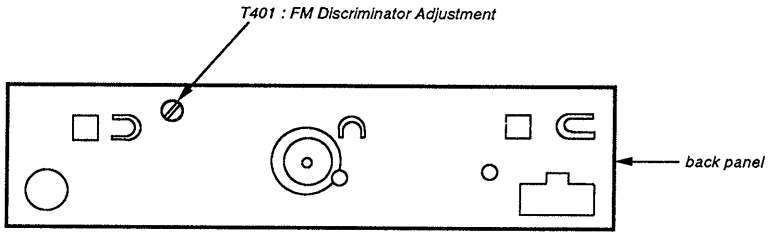


Adjustment Location : Main board

Adjustment Location :

【MAIN BOARD】 (Component side)


SVR3 : FM Stereo Separation Adjustment
SVR2 : FM Stereo Separation Adjustment
SVR1 : FM Auto-Scan Stop Level Adjustment
IC501
FE1
L5 : AM Tracking Adjustment
L4 : AM OSC Voltage Adjustment
L6 : FM Discriminator Adjustment
L2 :
AM Tracking Adjustment
L3 :
SVR5 : FM Auto-Scan Stop Level Adjustment
SVR4 : Limiter Sens Adjustment
CT801 : System Clock Adjustment



SECTION 4
DIAGRAMS

● SEMICONDUCTOR LEAD LAYOUTS

DTA144YK
DTC144YK
2SA1162-G
2SC2712-YG
2SC2814-F4
2SC3396

MTZJ-2.7A
MTZJ-9.1B
RM5.6ESB2
RM9.1ES-B3
1SS133

2SA733-K

1SS226

2SD1858-R-TV2

10E2

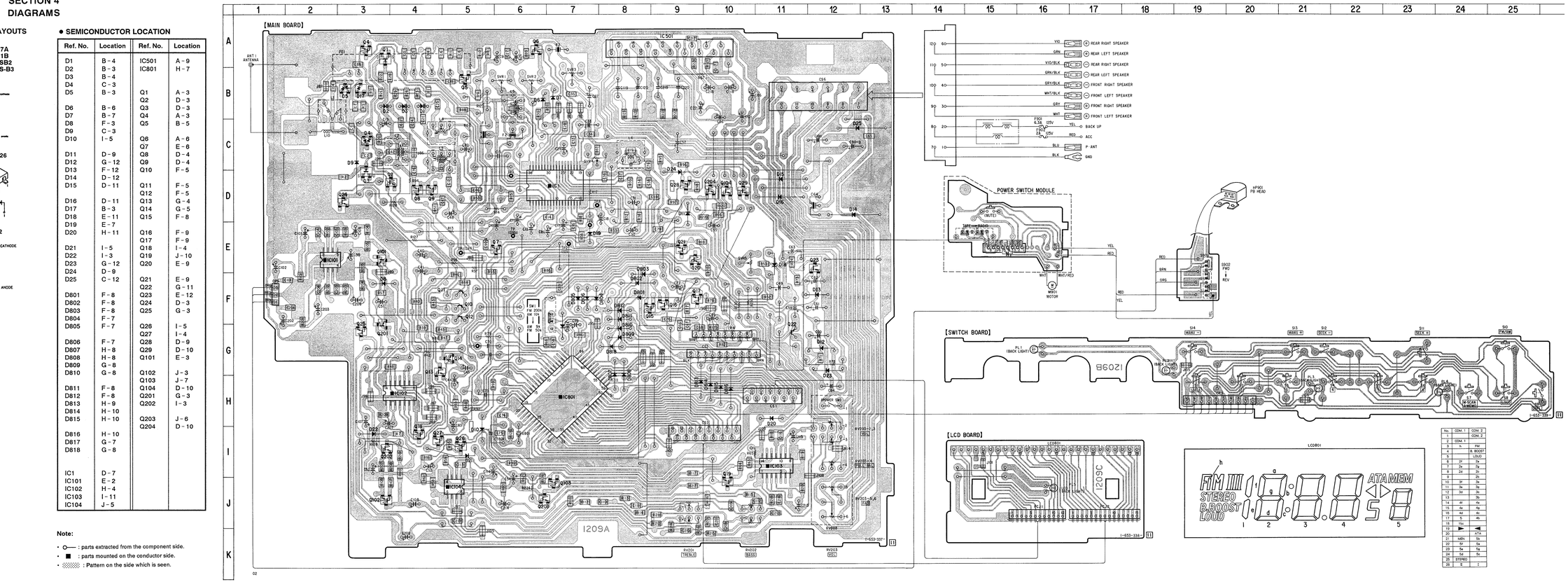
● SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location
D1	B-4	IC501	A-9
D2	B-3	IC801	H-7
D3	B-4		
D4	C-3		
D5	B-3	Q1	A-3
		Q2	D-3
D6	B-6	Q3	D-3
D7	B-7	Q4	A-3
D8	F-3	Q5	B-5
D9	C-3		
D10	I-5	Q6	A-6
		Q7	E-6
D11	D-9	Q8	D-4
D12	G-12	Q9	D-4
D13	F-12	Q10	F-5
D14	D-12		
D15	D-11	Q11	F-5
		Q12	F-5
D16	D-11	Q13	G-4
D17	B-3	Q14	G-5
D18	E-11	Q15	F-8
D19	E-7		
D20	H-11	Q16	F-9
		Q17	F-9
D21	I-5	Q18	I-4
D22	I-3	Q19	J-10
D23	G-12	Q20	E-9
D24	D-9		
D25	C-12	Q21	E-9
		Q22	G-11
D801	F-8	Q23	E-12
D802	F-8	Q24	D-3
D803	F-8	Q25	G-3
D804	F-7		
D805	F-7	Q26	I-5
		Q27	I-4
D806	F-7	Q28	D-9
D807	H-8	Q29	D-10
D808	H-8	Q101	E-3
D809	G-8		
D810	G-8	Q102	J-3
		Q103	J-7
D811	F-8	Q104	D-10
D812	F-8	Q201	G-3
D813	H-9	Q202	I-3
D814	H-10		
D815	H-10	Q203	J-6
		Q204	D-10
D816	H-10		
D817	G-7		
D818	G-8		
IC1	D-7		
IC101	E-2		
IC102	H-4		
IC103	I-11		
IC104	J-5		

Note:

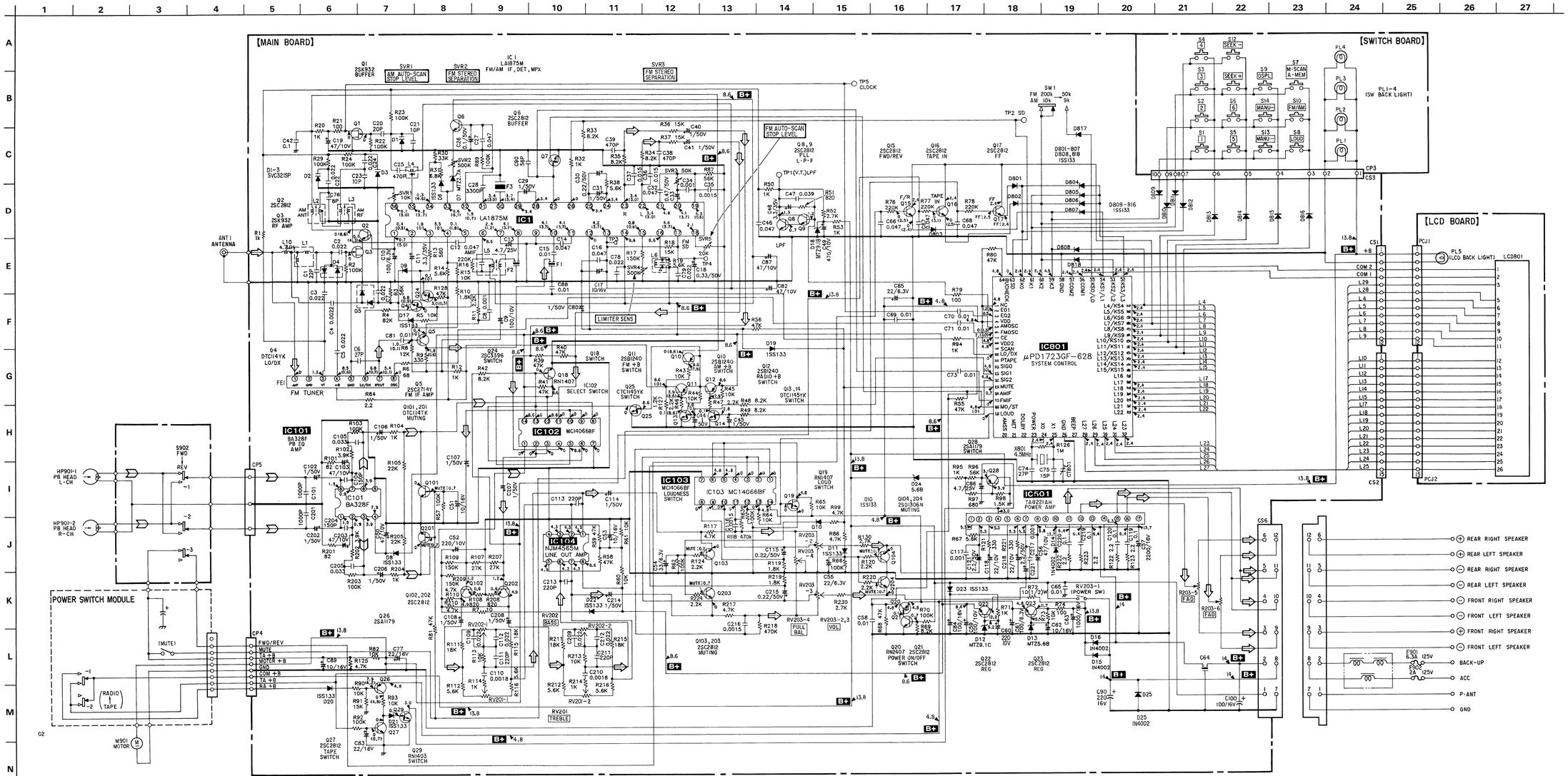
- ○— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ▨ : Pattern on the side which is seen.

4-1. PRINTED WIRING BOARDS

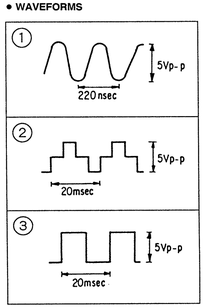


No.	COM. 1	COM. 2
1		COM. 2
2	COM. 1	
3	fL	1st
4		B. BOOST
5		LOUD
6	1f	1a
7	2a	2a
8	2d	2c
9		2b
10	3f	3a
11	3a	3g
12	3d	3c
13		3b
14	4f	4a
15	4a	4g
16	4d	4c
17	5	4b
18	fDe	
19	▶	◀
20		ATA
21	MEN	5b
22	1g	5a
23	5e	5g
24	1d	5c
25	STEREO	
26	fl	f

4-2. SCHEMATIC DIAGRAM ● Refer to page 23 for IC Block Diagrams.



● WAVEFORMS

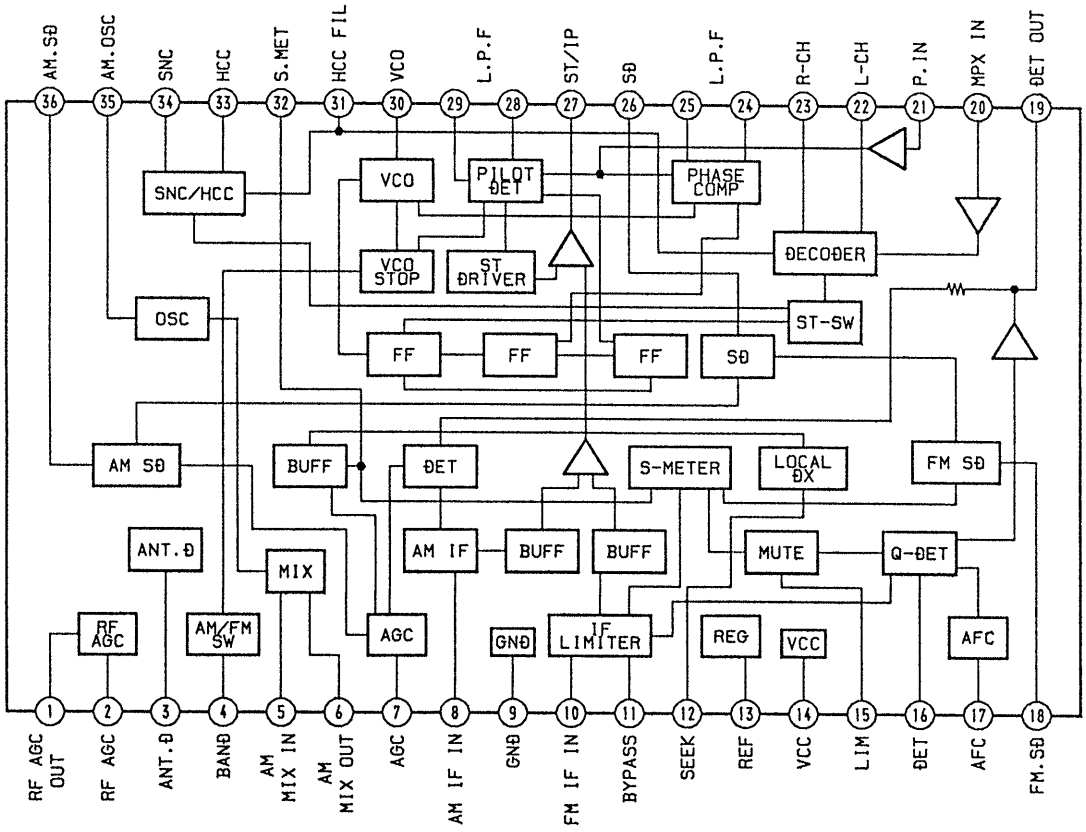


Note :

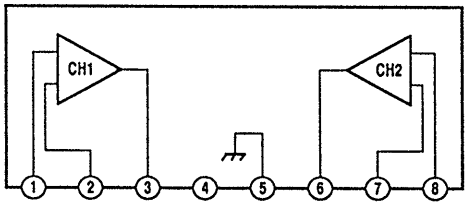
- All capacitors are in μ F unless otherwise noted. pF: μ μ F
  50WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : internal component.
- B+ : B+ Line
- ▭ : adjustment for repair.
- Power voltage is dc14.4V and fed with regulated dc power supply from BACK-UP and ACC terminals.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : AM
  ( ) : PLAY
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM ⇨ : PB

● IC BLOCK DIAGRAMS

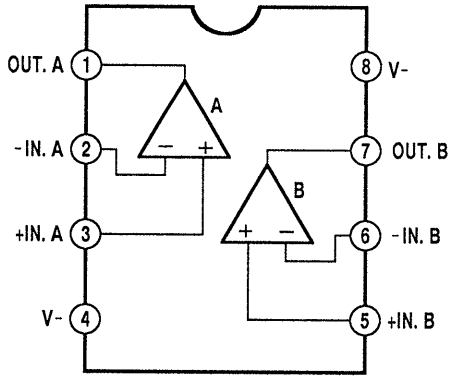
IC1 LA1875M



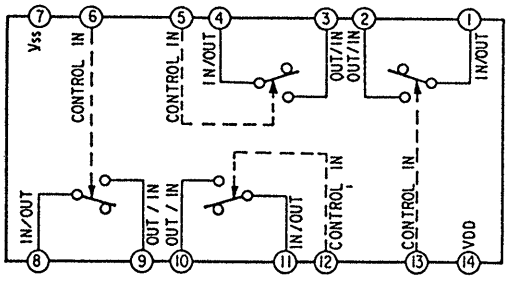
IC101 BA328



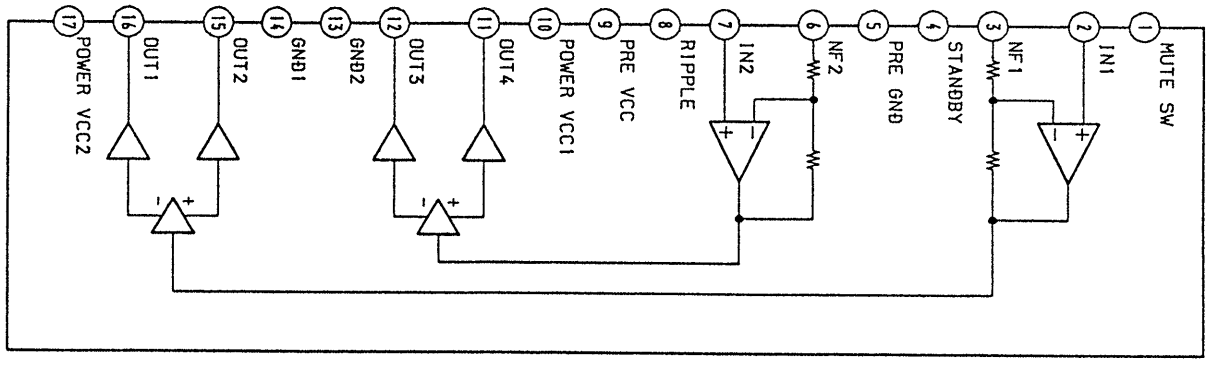
IC104 NJM4565M



IC102, 103 MC14066BF



IC501 TA8221AH

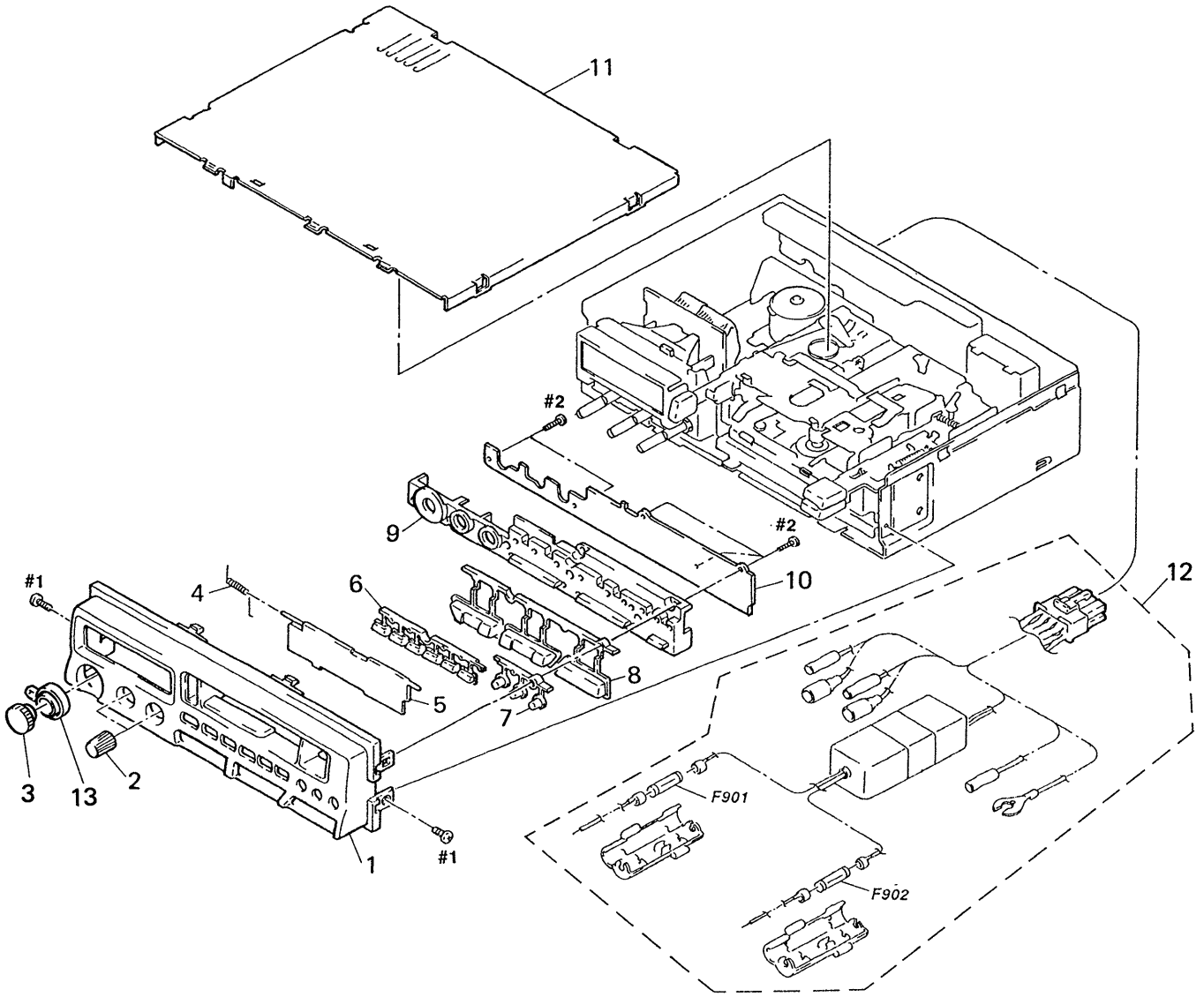


SECTION 5
EXPLODED VIEWS

NOTE :

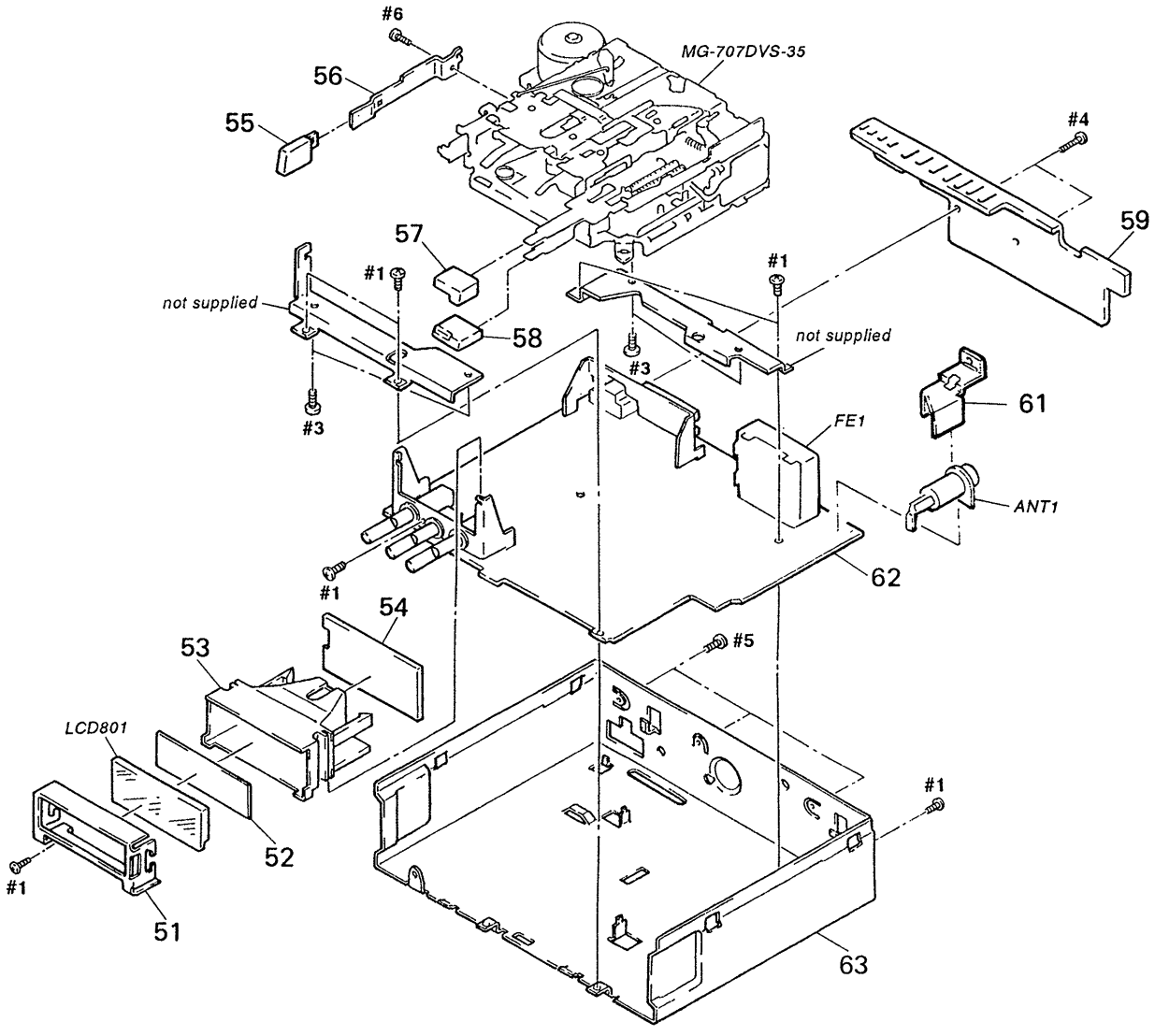
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

5-1. CHASSIS ASSEMBLY-1



Ref. No.	Part No.	Description	Remark
1	3-912-985-01	PANEL, FRONT	
2	3-913-020-01	KNOB (BASS)	
3	3-913-018-01	KNOB (VOL 1)	
4	3-917-704-01	SPRING, TORSION	
5	3-912-987-01	DOOR, CASSETTE	
6	3-912-992-01	BUTTON (PRESET)	
7	3-913-017-01	BUTTON (3 GANG)	
8	3-912-991-01	BUTTON (TUNING)	
9	3-913-022-01	PLATE, LIGHT GUIDE	
* 10	1-653-339-11	SWITCH BOARD	
* 11	3-913-032-01	COVER	
12	1-765-567-11	CORD (WITH CONNECTOR) (including F901, 902)	
13	3-913-019-01	KNOB (FADER)	
F901	1-532-422-11	FUSE 6.3A/125V	
F902	1-532-417-11	FUSE 2.0A/125V	

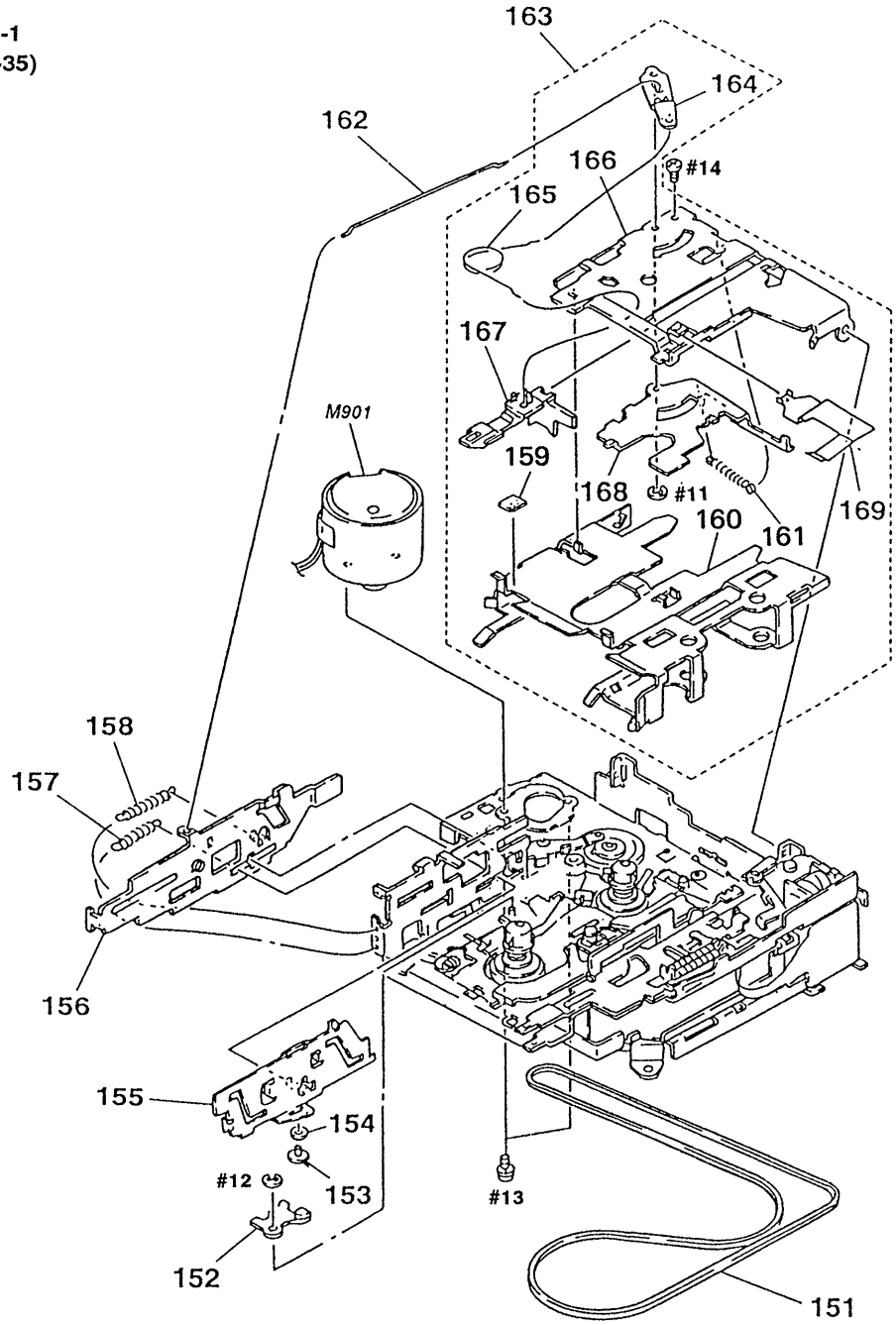
5-2. CHASSIS ASSEMBLY-2



Ref. No.	Part No.	Description	Remark
* 51	3-913-023-01	BRACKET (LCD)	
* 52	3-913-031-01	SHEET (LCD)	
* 53	3-913-021-01	HOLDER (LCD)	
* 54	1-653-338-11	LCD BOARD	
55	3-912-993-01	BUTTON (EJECT)	
* 56	3-913-030-01	LEVER (EJECT)	
57	3-912-994-01	BUTTON (FF)	
58	3-912-995-01	BUTTON (REW)	

Ref. No.	Part No.	Description	Remark
* 59	3-913-029-01	HEAT SINK	
* 61	3-913-024-01	BRACKET (ANT)	
* 62	A-3222-791-A	MAIN BOARD, COMPLETE	
* 63	3-917-815-01	CHASSIS	
ANT1	1-251-206-11	SOCKET (ANT)	
FE1	A-3298-201-A	FM TUNER UNIT	
LCD801	1-810-582-11	DISPLAY PANEL, LIQUID CRYSTAL	

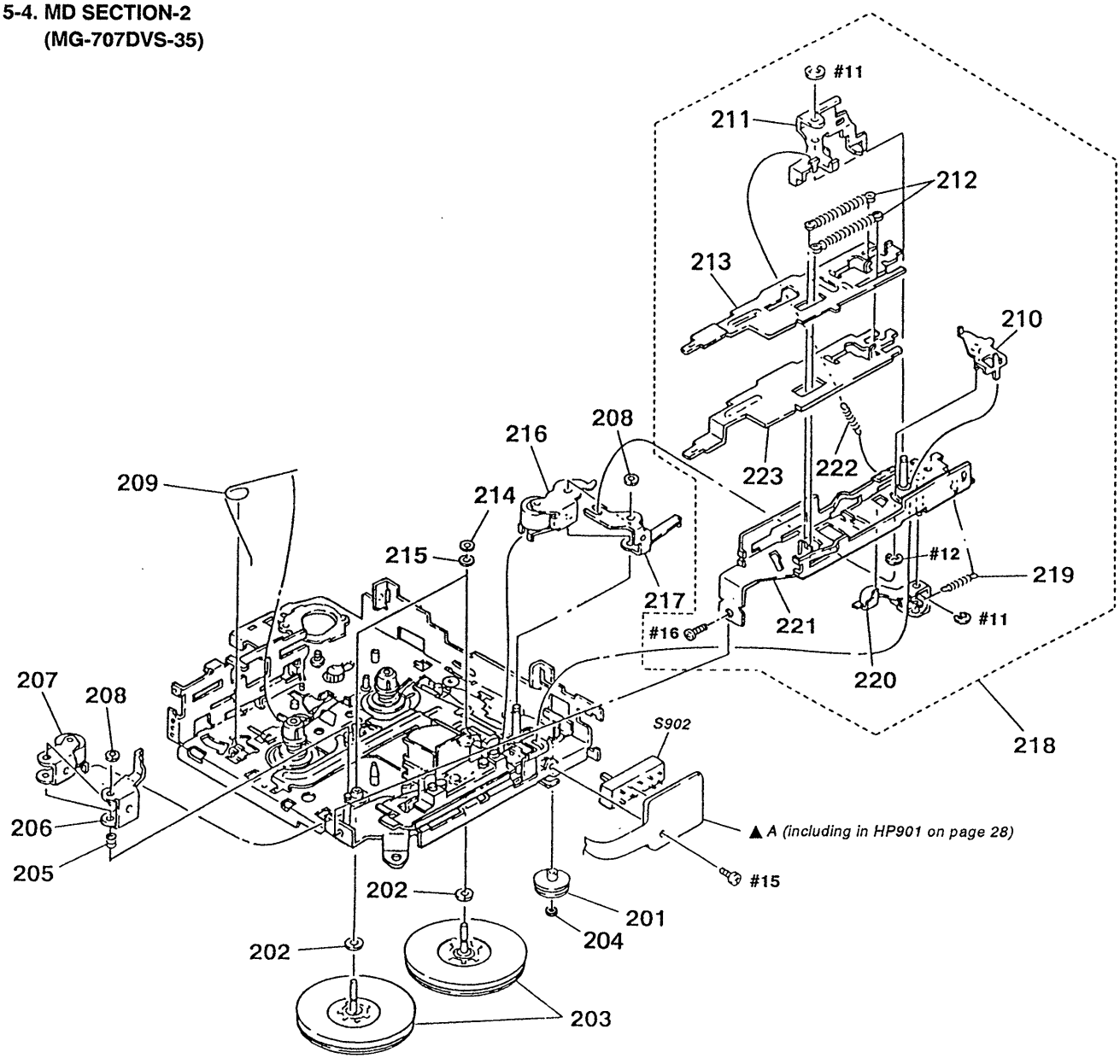
5-3. MD SECTION-1
(MG-707DVS-35)



Ref. No.	Part No.	Description	Remark
151	3-367-284-01	BELT, MAIN	
152	3-367-313-01	ARM, H.P PUSH	
153	3-367-264-01	ROLLER (A), H.P	
154	3-367-265-01	ROLLER (B), H.P	
* 155	3-367-311-01	PLATE (M), PUSH, C.H	
* 156	3-367-269-01	LEVER (M), PUSH	
157	3-367-267-01	SPRING, C.H	
158	3-367-268-01	SPRING, PUSH LEVER	
159	3-367-254-01	RUBBER, CUSHION	
* 160	3-367-256-01	CASE (M), CASSETTE	

Ref. No.	Part No.	Description	Remark
161	3-367-253-01	SPRING, C.D	
162	3-367-260-01	SPRING, P.E	
163	X-3362-789-2	CASSETE CASE ASSY	
* 164	3-367-252-01	RIVETING ASSY, P.E PLATE	
165	3-367-255-01	SPRING (C), REVERSE	
* 166	3-367-251-01	LIFTER, CASE	
167	3-367-258-01	SLIDER (C), PACK	
* 168	3-367-257-01	PLATE (B), C.D	
* 169	3-367-259-01	SPRING, PACK RETAINER	
M901	3-916-079-01	MOTOR ASSY	

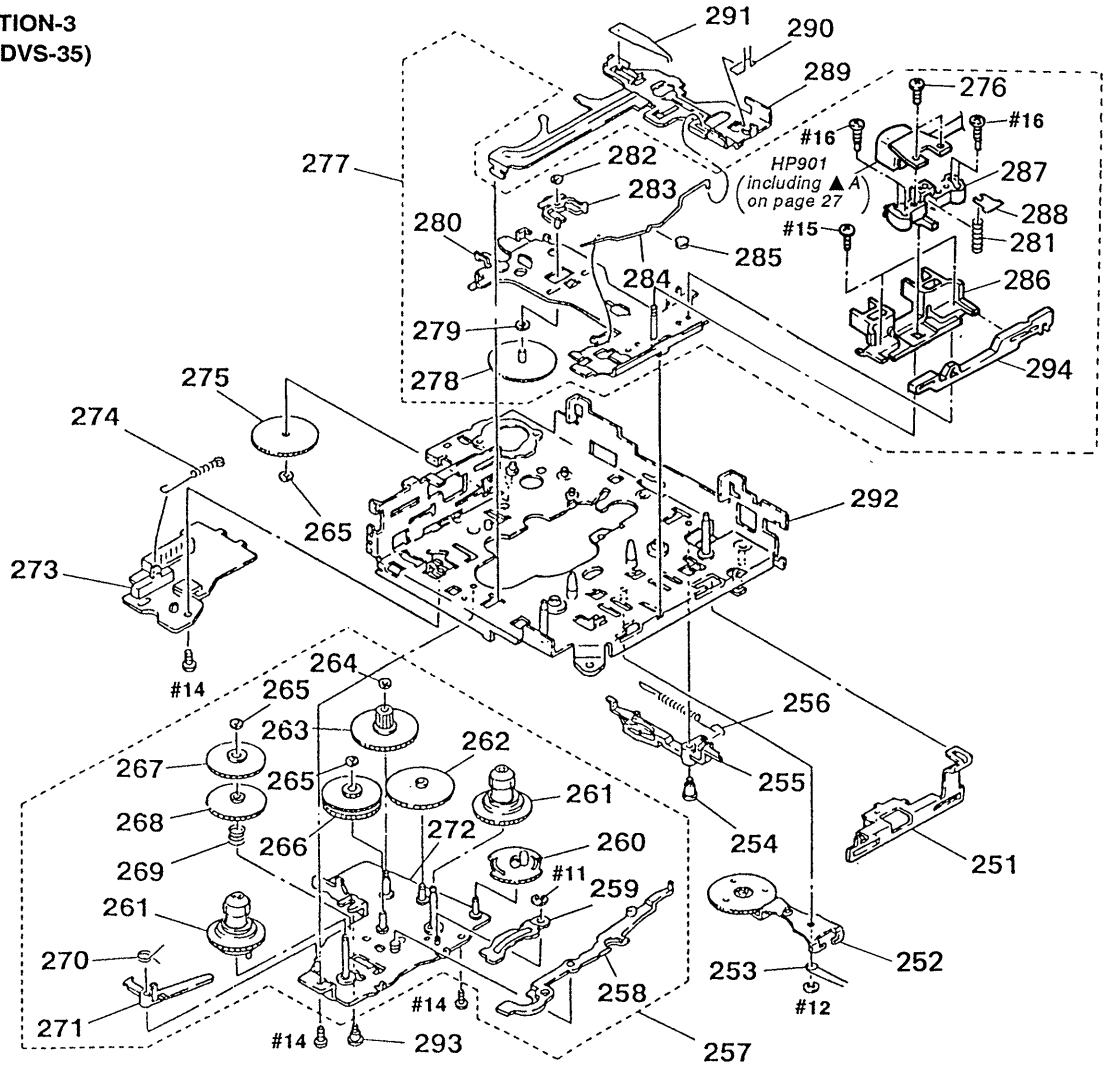
5-4. MD SECTION-2
(MG-707DVS-35)



Ref. No.	Part No.	Description	Remark
201	3-367-287-01	PULLEY, MIDWAY	
202	3-303-961-01	WASHER, POLY	
203	3-367-283-01	RIVETING ASSY, F.L CAPSTAN	
204	3-321-393-11	WASHER, STOPPER	
205	3-367-285-01	SPRING, P.P	
* 206	3-367-296-01	ARM, H.P RETURN	
207	3-367-232-01	ARM (R) ASSY, PINCH ROLLER	
208	3-676-387-00	POLY-SLIDER (DIA.1.6)	
209	3-367-314-01	SPRING (M), HEAD PANEL	
* 210	3-367-234-01	RIVETING ASSY, SEESAW PLATE(M)	
* 211	3-367-303-01	LOCK PLATE (M)	
212	3-916-080-01	SPRING, F.R LEVER	

Ref. No.	Part No.	Description	Remark
* 213	3-367-299-01	LEVER (M.V), FF	
214	3-592-680-00	WASHER (C), POLYETHYLENE	
215	3-315-495-41	WASHER	
216	3-367-231-01	ARM (F) ASSY, PINCH ROLLER	
* 217	3-367-292-01	PLATE, FUNCTION, SEESAW	
218	X-3362-792-1	FR LEVER ASSY	
219	3-367-302-01	SPRING, P.C	
* 220	3-367-301-01	PLATE, P.C	
* 221	3-367-233-01	RIVETING ASSY, F.R BRACKET (M)	
222	3-367-304-01	SPRING (M), LOCK PLATE	
* 223	3-367-300-01	LEVER (M.V), REW	
S902	1-572-712-11	SWITCH, SLIDE (FWD/REV)	

5-5. MD SECTION-3
(MG-707DVS-35)



Ref.No.	Part No.	Description	Remark
* 251	3-367-294-01	PLATE (M), F.R SLIDE	
252	X-3362-791-2	F•R WORKING PLATE ASSY	
253	3-367-282-01	SPRING (M), F.R	
254	3-367-290-01	SCREW (T), COLOR	
255	3-367-289-01	ARM (C), TRIGGER	
256	3-367-297-01	SPRING (C), T.A	
257	X-3365-723-1	M•G PLATE ASSY	
258	3-367-241-01	PLATE (B), E.D	
* 259	3-367-245-01	PLATE, LIFTUP	
260	3-367-240-01	GEAR (M), REVERSE	
261	3-383-370-01	REEL ASSY, T	
262	3-367-239-01	GEAR, E.D	
263	3-367-238-01	GEAR, P.D	
264	3-676-387-00	POLY-SLIDER (DIA.1.6)	
265	3-318-236-01	WASHER, POLY, SLIT	
266	3-367-244-01	CLUTCH ASSY, P	
267	3-367-236-01	GEAR (R), P	
268	3-367-237-01	GEAR (R), F	
269	3-367-243-01	SPRING, T.N	
270	3-367-247-01	SPRING	
271	3-367-246-01	ARM, REVERSE PREVENTION	
* 272	3-367-242-01	RIVETING ASSY, M.G PLATE	
273	3-916-081-01	SWITCH MODULE, POWER	

Ref.No.	Part No.	Description	Remark
274	3-367-293-01	SPRING, POWER SWITCH	
275	3-370-853-01	GEAR (V), MAIN	
276	3-916-082-01	SCREW, FIX	
277	X-3368-749-1	HEAD PANEL ASSY	
278	3-367-227-01	GEAR, P	
279	3-701-447-11	WASHER, 10	
* 280	3-383-367-01	RIVETING ASSY, HEAD PANEL	
281	3-383-368-01	SPRING, H.G	
282	3-579-788-01	WASHER, STOPPER	
283	3-367-226-01	METAL, P. GEAR	
284	3-367-225-01	SPRING, P.R	
285	3-367-224-01	ROLLER, SP	
* 286	3-383-373-01	GUIDE (U), TAPE	
* 287	3-383-374-01	HOLDER (B), HEAD	
288	3-383-369-01	WASHER, FASTEN	
* 289	3-367-272-01	PLATE, MAIN	
290	3-367-274-01	SPRING, H.S	
291	3-367-273-01	SPRING, M.S	
* 292	3-375-374-01	RIVETING ASSY, CHASSIS	
293	3-367-295-01	SCREW (P), COLOR	
* 294	3-383-376-01	PLATE (B), SHIFT	
HP901	1-543-976-11	HEAD, MAGNETIC (PLAYBACK)	

SECTION 6
ELECTRICAL PARTS LIST

LCD **MAIN**

NOTE :

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ , for example :
  uA.... : μ A.... , uPA.... : μ PA....
  uPB.... : μ PB.... , uPC.... : μ PC....
  uPD.... : μ PD....
- CAPACITORS
  uF : μ F
- COILS
  uH : μ H

When indicating parts by reference number, please include the board.

Ref.No.	Part No.	Description			Remark
*	1-653-338-11	LCD BOARD			
		*********			
		< JUMPER RESISTOR >			
J101	1-216-295-00	METAL CHIP	0	5% 1/10W	
		< LIQUID CRYSTAL DISPLAY >			
LCD801	1-810-582-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< PILOT LAMP >			
PL5	1-517-334-11	LAMP, PILOT(LCD BACK LIGHT)			
**********					
*	A-3222-791-A	MAIN BOARD, COMPLETE			
		********			
*	3-913-024-01	BRACKET (ANT)			
		< SOCKET >			
ANT1	1-251-206-11	SOCKET (ANT)			
		< CAPACITOR >			
C1	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C2	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C3	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C4	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C5	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C6	1-163-237-11	CERAMIC CHIP	27PF	0.5PF	50V
C7	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C8	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C9	1-124-584-00	ELECT	100uF	20%	10V
C10	1-124-584-00	ELECT	100uF	20%	10V
C11	1-126-303-11	ELECT	3.3uF	20%	35V
C12	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C13	1-126-163-11	ELECT	4.7uF	20%	50V
C14	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C15	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C16	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C17	1-126-157-11	ELECT	10uF	20%	16V
C18	1-124-252-00	ELECT	0.33uF	20%	50V
C19	1-126-947-11	ELECT	47uF	20%	10V
C20	1-163-234-11	CERAMIC CHIP	20PF	5%	50V
C21	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C22	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C23	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C24	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C25	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C26	1-124-463-00	ELECT	0.1uF	20%	50V
C27	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C28	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C29	1-124-903-11	ELECT	1uF	20%	50V
C30	1-124-464-11	ELECT	0.22uF	20%	50V
C31	1-126-301-11	ELECT	1uF	20%	50V
C32	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C33	1-126-959-11	ELECT	0.47uF	20%	50V
C34	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C35	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C36	1-163-023-00	CERAMIC CHIP	0.015uF	5%	50V
C37	1-163-023-00	CERAMIC CHIP	0.015uF	5%	50V
C38	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C39	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C40	1-126-301-11	ELECT	1uF	20%	50V
C41	1-126-301-11	ELECT	1uF	20%	50V
C42	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C44	1-126-301-11	ELECT	1uF	20%	50V
C45	1-126-301-11	ELECT	1uF	20%	50V
C46	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C47	1-162-587-11	CERAMIC CHIP	0.039uF	10%	25V
C48	1-126-303-11	ELECT	3.3uF	20%	35V
C49	1-126-925-11	ELECT	470uF	20%	10V
C50	1-126-947-11	ELECT	47uF	20%	10V
C51	1-126-157-11	ELECT	10uF	20%	16V
C52	1-126-176-11	ELECT	220uF	20%	10V
C53	1-126-157-11	ELECT	10uF	20%	16V
C54	1-124-252-00	ELECT	0.33uF	20%	50V
C55	1-126-157-11	ELECT	10uF	20%	16V
C56	1-126-947-11	ELECT	47uF	20%	10V
C57	1-126-768-11	ELECT	2200uF	20%	16V
C58	1-164-232-11	CERAMIC CHIP	0.01uF		50V

MAIN

Ref.No.	Part No.	Description			Remark
C59	1-126-933-11	ELECT	100uF	20%	10V
C60	1-126-923-11	ELECT	220uF	20%	10V
C61	1-124-584-00	ELECT	100uF	20%	10V
C62	1-126-157-11	ELECT	10uF	20%	16V
C63	1-126-952-11	ELECT	1000uF	20%	16V
C65	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C66	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C67	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C68	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C69	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C70	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C71	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C73	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C74	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C75	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C76	1-163-091-11	CERAMIC CHIP	8PF		50V
C77	1-124-234-00	ELECT	22uF	20%	16V
C78	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C79	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C80	1-124-463-00	ELECT	0.1uF	20%	50V
C81	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C82	1-126-947-11	ELECT	47uF	20%	10V
C83	1-124-916-11	ELECT	22uF	20%	63V
C84	1-124-584-00	ELECT	100uF	20%	10V
C85	1-126-153-11	ELECT	22uF	20%	6.3V
C86	1-126-163-11	ELECT	4.7uF	20%	50V
C87	1-126-947-11	ELECT	47uF	20%	10V
C88	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C89	1-126-157-11	ELECT	10uF	20%	16V
C90-A	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C90-B	1-126-934-11	ELECT	220uF	20%	16V
C100	1-126-101-11	ELECT	100uF	20%	16V
C101	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C102	1-126-301-11	ELECT	1uF	20%	50V
C103	1-124-589-11	ELECT	47uF	20%	16V
C104	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C105	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C106	1-126-301-11	ELECT	1uF	20%	50V
C107	1-126-301-11	ELECT	1uF	20%	50V
C108	1-126-301-11	ELECT	1uF	20%	50V
C109	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C110	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C111	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C112	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C113	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C114	1-126-301-11	ELECT	1uF	20%	50V
C115	1-124-464-11	ELECT	0.22uF	20%	50V
C116	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C117	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C118	1-124-916-11	ELECT	22uF	20%	63V
C119	1-130-495-11	MYLAR	0.1uF	5%	50V
C120	1-130-495-11	MYLAR	0.1uF	5%	50V
C121	1-124-925-11	ELECT	2.2uF	20%	100V
C201	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C202	1-126-301-11	ELECT	1uF	20%	50V
C203	1-124-589-11	ELECT	47uF	20%	16V
C204	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C205	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C206	1-126-301-11	ELECT	1uF	20%	50V
C207	1-126-301-11	ELECT	1uF	20%	50V
C208	1-126-301-11	ELECT	1uF	20%	50V
C209	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C210	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C211	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C212	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C213	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C214	1-126-301-11	ELECT	1uF	20%	50V
C215	1-124-464-11	ELECT	0.22uF	20%	50V
C216	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C217	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C218	1-124-916-11	ELECT	22uF	20%	63V
C219	1-130-495-11	MYLAR	0.1uF	5%	50V
C220	1-130-495-11	MYLAR	0.1uF	5%	50V
C221	1-124-925-11	ELECT	2.2uF	20%	100V

< CONNECTOR >

* CP5	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P
* CS1	1-562-882-11	SOCKET, CONNECTOR 12P
* CS2	1-766-490-11	SOCKET, CONNECTOR 15P
* CS3	1-564-712-11	PIN, CONNECTOR (SMALL TYPE)10P
CS6	1-766-474-11	PIN, CONNECTOR (PC BOARD) 12P BOARD

< FILTER >

C64	1-527-937-00	FIFTER, CERAMIC

< TRIMMER >

CT801	1-141-245-00	CAP, TRIMMER 30PF

< DIODE >

D1	8-719-049-70	DIODE SVC323R
D2	8-719-049-70	DIODE SVC323R
D3	8-719-049-70	DIODE SVC323R
D4	8-719-800-76	DIODE 1SS226
D5	8-719-800-76	DIODE 1SS226
D6	8-719-901-33	DIODE 1SS133
D7	8-719-981-94	DIODE MTZJ-2.7A
D8	8-719-901-33	DIODE 1SS133
D9	8-719-901-33	DIODE 1SS133

Ref. No.	Part No.	Description	Remark
D10	8-719-901-33	DIODE 1SS133	
D11	8-719-901-33	DIODE 1SS133	
D12	8-719-110-14	DIODE RD9.1ES-B3	
D13	8-719-109-89	DIODE RD5.6ESB2	
D14	8-719-200-02	DIODE 10E2	
D15	8-719-200-02	DIODE 10E2	
D16	8-719-200-02	DIODE 10E2	
D17	8-719-801-48	DIODE 1SS193	
D18	8-719-921-71	DIODE MTZJ-9.1B	
D19	8-719-901-33	DIODE 1SS133	
D20	8-719-901-33	DIODE 1SS133	
D21	8-719-901-33	DIODE 1SS133	
D22	8-719-901-33	DIODE 1SS133	
D23	8-719-901-33	DIODE 1SS133	
D24	8-719-109-89	DIODE RD5.6ESB2	
D25	8-719-200-02	DIODE 10E2	
D801	8-719-901-33	DIODE 1SS133	
D802	8-719-901-33	DIODE 1SS133	
D803	8-719-901-33	DIODE 1SS133	
D804	8-719-901-33	DIODE 1SS133	
D805	8-719-901-33	DIODE 1SS133	
D806	8-719-901-33	DIODE 1SS133	
D807	8-719-901-33	DIODE 1SS133	
D808	8-719-901-33	DIODE 1SS133	
D809	8-719-901-33	DIODE 1SS133	
D810	8-719-901-33	DIODE 1SS133	
D811	8-719-901-33	DIODE 1SS133	
D812	8-719-901-33	DIODE 1SS133	
D813	8-719-901-33	DIODE 1SS133	
D814	8-719-901-33	DIODE 1SS133	
D815	8-719-901-33	DIODE 1SS133	
D816	8-719-901-33	DIODE 1SS133	
D817	8-719-901-33	DIODE 1SS133	
D818	8-719-901-33	DIODE 1SS133	
		< FILTER >	
F1	1-579-083-11	FILTER, CERAMIC	
F2	1-567-309-11	FILTER, CERAMIC	
F3	1-579-272-11	OSCILLATOR, CERAMIC (456.60kHz)	
		< TUNER UNIT >	
FE1	A-3298-201-A	FM TUNER UNIT	
		< IC >	
IC1	8-759-261-38	IC LA1875M-TP-T1	
IC101	8-759-046-31	IC BA328F	
IC102	8-759-206-70	IC TC4066BF-TP2	
IC103	8-759-206-70	IC TC4066BF-TP2	
IC104	8-759-710-28	NJ M4565M-A	

Ref. No.	Part No.	Description	Remark
IC501	8-759-156-00	IC TA8221AH	
IC801	8-759-079-34	IC uPD1723GF-628-3BE	
		< JUMPER RESISTOR >	
J80	1-216-296-00	METAL CHIP 0 5% 1/8W	
J81	1-216-296-00	METAL CHIP 0 5% 1/8W	
J82	1-216-295-00	METAL CHIP 0 5% 1/10W	
J83	1-216-295-00	METAL CHIP 0 5% 1/10W	
J84	1-216-295-00	METAL CHIP 0 5% 1/10W	
J85	1-216-295-00	METAL CHIP 0 5% 1/10W	
J86	1-216-295-00	METAL CHIP 0 5% 1/10W	
J87	1-216-295-00	METAL CHIP 0 5% 1/10W	
J88	1-216-295-00	METAL CHIP 0 5% 1/10W	
J90	1-216-295-00	METAL CHIP 0 5% 1/10W	
J91	1-216-296-00	METAL CHIP 0 5% 1/8W	
J92	1-216-296-00	METAL CHIP 0 5% 1/8W	
J93	1-216-296-00	METAL CHIP 0 5% 1/8W	
J94	1-216-296-00	METAL CHIP 0 5% 1/8W	
J95	1-216-295-00	METAL CHIP 0 5% 1/10W	
J96	1-216-296-00	METAL CHIP 0 5% 1/8W	
J97	1-216-296-00	METAL CHIP 0 5% 1/8W	
J98	1-216-296-00	METAL CHIP 0 5% 1/8W	
J99	1-216-296-00	METAL CHIP 0 5% 1/8W	
J102	1-216-295-00	METAL CHIP 0 5% 1/10W	
J103	1-216-295-00	METAL CHIP 0 5% 1/10W	
J104	1-216-296-00	METAL CHIP 0 5% 1/8W	
J108	1-216-296-00	METAL CHIP 0 5% 1/8W	
JP401	1-216-296-00	METAL CHIP 0 5% 1/8W	
		< COIL >	
L1	1-409-782-11	COIL, CHOKE	
L2	1-409-787-11	COIL, ANT	
L3	1-409-788-11	COIL, RF	
L4	1-409-785-11	COIL, OSC	
L5	1-409-786-11	COIL, IFT	
L6	1-409-783-11	TRANSFORMER, IF	
L10	1-408-559-11	INDUCTOR 4.7uH	
		< TRANSISTOR >	
Q1	8-729-027-80	TRANSISTOR 2SK932-22	
Q2	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3	8-729-027-80	TRANSISTOR 2SK932-22	
Q4	8-729-900-52	TRANSISTOR DTC114YK	
Q5	8-729-804-72	TRANSISTOR 2SC2814-F4	
Q6	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q7	8-729-900-52	TRANSISTOR DTC114YK	
Q8	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q9	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q10	8-729-173-38	TRANSISTOR 2SA733-K	

MAIN

Ref. No.	Part No.	Description	Remark
Q11	8-729-173-38	TRANSISTOR 2SA733-K	
Q12	8-729-173-38	TRANSISTOR 2SA733-K	
Q13	8-729-900-52	TRANSISTOR DTC114YK	
Q14	8-729-900-52	TRANSISTOR DTC114YK	
Q15	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q16	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q17	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q18	8-729-900-52	TRANSISTOR DTC114YK	
Q19	8-729-900-52	TRANSISTOR DTC114YK	
Q20	8-729-901-46	TRANSISTOR DTA114YK	
Q21	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q22	8-729-931-15	TRANSISTOR 2SD1858-R-TV2	
Q23	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q24	8-729-805-43	TRANSISTOR 2SC3396	
Q25	8-729-900-52	TRANSISTOR DTC114YK	
Q26	8-729-216-22	TRANSISTOR 2SA1162-G	
Q27	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q28	8-729-216-22	TRANSISTOR 2SA1162-G	
Q29	8-729-207-57	TRANSISTOR RN1403	
Q101	8-729-902-99	TRANSISTOR DTC114TK	
Q102	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q103	8-729-881-22	TRANSISTOR 2SC2812-L6	
Q104	8-729-027-81	TRANSISTOR 2SD1306NE	
Q201	8-729-902-99	TRANSISTOR DTC114TK	
Q202	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q203	8-729-881-22	TRANSISTOR 2SC2812-L6	
Q204	8-729-027-81	TRANSISTOR 2SD1306NE	

< RESISTOR >

Ref. No.	Part No.	Description			Remark
R1	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R2	1-216-097-00	METAL CHIP	100K	5%	1/10W
R3	1-216-091-00	METAL CHIP	56K	5%	1/10W
R4	1-216-095-00	METAL CHIP	82K	5%	1/10W
R5	1-216-073-00	METAL CHIP	10K	5%	1/10W
R6	1-249-403-11	CARBON	68	5%	1/4W
R7	1-216-001-00	METAL CHIP	10	5%	1/10W
R8	1-216-075-00	METAL CHIP	12K	5%	1/10W
R9	1-216-037-00	METAL CHIP	330	5%	1/10W
R10	1-216-055-11	METAL GLAZE	1.8K	5%	1/10W
R11	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R12	1-249-417-11	CARBON	1K	5%	1/4W
R13	1-247-825-11	CARBON	560	5%	1/4W
R14	1-249-426-11	CARBON	5.6K	5%	1/4W
R15	1-216-073-00	METAL CHIP	10K	5%	1/10W
R16	1-216-105-00	METAL CHIP	220K	5%	1/10W
R17	1-247-883-00	CARBON	150K	5%	1/4W
R18	1-216-077-00	METAL CHIP	15K	5%	1/10W
R19	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R20	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R21	1-216-025-00	METAL CHIP	100	5%	1/10W
R22	1-216-097-00	METAL CHIP	100K	5%	1/10W
R23	1-216-097-00	METAL CHIP	100K	5%	1/10W
R24	1-216-097-00	METAL CHIP	100K	5%	1/10W
R29	1-216-097-00	METAL CHIP	100K	5%	1/10W
R30	1-216-085-00	METAL CHIP	33K	5%	1/10W
R31	1-216-069-11	METAL GLAZE	6.8K	5%	1/10W
R32	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R33	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R34	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R35	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R36	1-216-077-00	METAL CHIP	15K	5%	1/10W
R37	1-216-077-00	METAL CHIP	15K	5%	1/10W
R38	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R39	1-216-089-00	METAL CHIP	47K	5%	1/10W
R40	1-216-089-00	METAL CHIP	47K	5%	1/10W
R41	1-216-089-00	METAL CHIP	47K	5%	1/10W
R42	1-249-428-11	CARBON	8.2K	5%	1/4W
R43	1-216-073-00	METAL CHIP	10K	5%	1/10W
R44	1-216-073-00	METAL CHIP	10K	5%	1/10W
R45	1-216-073-00	METAL CHIP	10K	5%	1/10W
R46	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R47	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R48	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R49	1-216-220-00	METAL GLAZE	8.2K	5%	1/8W
R50	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R51	1-216-196-00	METAL CHIP	820	5%	1/10W
R52	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R53	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R55	1-216-089-00	METAL CHIP	47K	5%	1/10W
R56	1-216-238-00	METAL GLAZE	47K	5%	1/8W
R57	1-216-097-00	METAL CHIP	100K	5%	1/10W
R58	1-216-238-00	METAL GLAZE	47K	5%	1/8W
R59	1-216-089-00	METAL CHIP	47K	5%	1/10W
R60	1-216-222-00	METAL GLAZE	10K	5%	1/8W
R61	1-216-073-00	METAL CHIP	10K	5%	1/10W
R62	1-216-097-00	METAL CHIP	100K	5%	1/10W
R63	1-216-097-00	METAL CHIP	100K	5%	1/10W
R64	1-216-073-00	METAL CHIP	10K	5%	1/10W
R65	1-247-855-11	CARBON	10K	5%	1/4W
R66	1-216-097-00	METAL CHIP	100K	5%	1/10W
R67	1-249-426-11	CARBON	5.6K	5%	1/4W
R68	1-216-089-00	METAL CHIP	47K	5%	1/10W
R69	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R70	1-216-097-00	METAL CHIP	100K	5%	1/10W
R71	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R71	1-216-043-00	METAL CHIP	560	5%	1/10W
R72	1-247-727-11	CARBON	10	5%	1/2W
R73	1-216-073-00	METAL CHIP	10K	5%	1/10W

Ref.No.	Part No.	Description			Remark
R74	1-216-174-00	METAL GLAZE	100	5%	1/8W
R76	1-216-105-00	METAL CHIP	220K	5%	1/10W
R77	1-216-105-00	METAL CHIP	220K	5%	1/10W
R78	1-216-105-00	METAL CHIP	220K	5%	1/10W
R79	1-247-807-11	CARBON	100	5%	1/4W
R80	1-216-238-00	METAL GLAZE	47K	5%	1/8W
R81	1-247-871-11	CARBON	47K	5%	1/4W
R82	1-216-073-00	METAL CHIP	10K	5%	1/10W
R84	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R86	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R87	1-216-091-00	METAL CHIP	56K	5%	1/10W
R89	1-216-097-00	METAL CHIP	100K	5%	1/10W
R90	1-216-073-00	METAL CHIP	10K	5%	1/10W
R91	1-216-077-00	METAL CHIP	15K	5%	1/10W
R92	1-247-879-11	CARBON	100K	5%	1/4W
R93	1-216-073-00	METAL CHIP	10K	5%	1/10W
R94	1-249-417-11	CARBON	1K	5%	1/4W
R95	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R96	1-216-091-00	METAL CHIP	56K	5%	1/10W
R97	1-216-045-00	METAL CHIP	680	5%	1/10W
R98	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R99	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R101	1-216-023-00	METAL CHIP	82	5%	1/10W
R102	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R103	1-216-097-00	METAL CHIP	100K	5%	1/10W
R104	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R105	1-216-081-00	METAL CHIP	22K	5%	1/10W
R107	1-216-083-11	METAL GLAZE	27K	5%	1/10W
R108	1-216-047-00	METAL CHIP	820	5%	1/10W
R109	1-247-883-00	CARBON	150K	5%	1/4W
R110	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W
R111	1-216-079-00	METAL CHIP	18K	5%	1/10W
R112	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R113	1-216-073-00	METAL CHIP	10K	5%	1/10W
R114	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R115	1-216-079-00	METAL CHIP	18K	5%	1/10W
R116	1-216-216-00	METAL GLAZE	5.6K	5%	1/8W
R117	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R118	1-216-113-00	METAL CHIP	470K	5%	1/10W
R119	1-216-055-11	METAL GLAZE	1.8K	5%	1/10W
R120	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W
R121	1-216-037-00	METAL CHIP	330	5%	1/10W
R122	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R123	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R124	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R125	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R126	1-216-121-00	METAL CHIP	1M	5%	1/10W
R127	1-247-714-11	CARBON	1.2K	5%	1/4W
R128	1-247-871-11	CARBON	47K	5%	1/4W

Ref.No.	Part No.	Description			Remark
R130	1-249-422-11	CARBON	2.7K	5%	1/4W
R201	1-216-023-00	METAL CHIP	82	5%	1/10W
R202	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R203	1-216-097-00	METAL CHIP	100K	5%	1/10W
R204	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R205	1-216-081-00	METAL CHIP	22K	5%	1/10W
R207	1-216-083-11	METAL GLAZE	27K	5%	1/10W
R208	1-216-047-00	METAL CHIP	820	5%	1/10W
R209	1-216-101-00	METAL CHIP	150K	5%	1/10W
R210	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R211	1-216-079-00	METAL CHIP	18K	5%	1/10W
R212	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R213	1-216-073-00	METAL CHIP	10K	5%	1/10W
R214	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R215	1-216-079-00	METAL CHIP	18K	5%	1/10W
R216	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R217	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R218	1-216-113-00	METAL CHIP	470K	5%	1/10W
R219	1-216-055-11	METAL GLAZE	1.8K	5%	1/10W
R220	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R221	1-216-037-00	METAL CHIP	330	5%	1/10W
R222	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R223	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R224	1-247-839-11	CARBON	2.2K	5%	1/4W
R230	1-249-422-11	CARBON	2.7K	5%	1/4W

< VARIABLE RESISTOR >

RV201	1-223-721-11	RES, VAR(TREBLE)
RV202	1-223-721-11	RES, VAR(BASS)
RV203	1-223-722-11	RES, VAR(VOL/BAL/FAD/POWER SW)
SVR1	1-228-994-00	RES, ADJ, METAL 10K (AM AUTO-SCAN STOP LEVEL)
SVR2	1-228-999-00	RES, ADJ, METAL 470K (FM STEREO SEPARATION)
SVR3	1-228-996-00	RES, ADJ, METAL 47K (FM STEREO SEPARATION)
SVR4	1-228-999-00	RES, ADJ, METAL 470K(LIMITER SENS)
SVR5	1-228-995-00	RES, ADJ, METAL 22K (FM AUTO-SCAN STOP LEVEL)

< SWITCH >

SW1	1-571-796-11	SLIDE SWITCH(FM 200K, AM 10K/AM 9K, FM 50K

< CRYSTAL >

X801	1-760-413-11	VIBRATOR, CRYSTAL (4.5MHz)

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SWITCH

Ref.No.	Part No.	Description	Remark
*	1-653-339-11	SWITCH BOARD	
		**********	
		< JUMPER RESISTOR >	
J105	1-216-295-00	METAL CHIP 0 5% 1/10W	
J106	1-216-295-00	METAL CHIP 0 5% 1/10W	
		< PILOT LAMP >	
PL1	1-517-334-11	LAMP, PILOT(BACK LIGHT)	
PL2	1-517-334-11	LAMP, PILOT(BACK LIGHT)	
PL3	1-517-334-11	LAMP, PILOT(BACK LIGHT)	
PL4	1-517-334-11	LAMP, PILOT(BACK LIGHT)	
		< SWITCH >	
S1	1-762-056-11	SWITCH, KEYBOARD(1)	
S2	1-762-056-11	SWITCH, KEYBOARD(2)	
S3	1-762-056-11	SWITCH, KEYBOARD(3)	
S4	1-762-056-11	SWITCH, KEYBOARD(4)	
S5	1-762-056-11	SWITCH, KEYBOARD(5)	
S6	1-762-056-11	SWITCH, KEYBOARD(6)	
S7	1-762-056-11	SWITCH, KEYBOARD(M•SCAN/A•MEN)	
S8	1-762-056-11	SWITCH, KEYBOARD(LOUD)	
S9	1-762-056-11	SWITCH, KEYBOARD(DSPL)	
S10	1-762-056-11	SWITCH, KEYBOARD(FM/AM)	
S11	1-762-056-11	SWITCH, KEYBOARD(SEEK +)	
S12	1-762-056-11	SWITCH, KEYBOARD(SEEK -)	
S13	1-762-056-11	SWITCH, KEYBOARD(MANU +)	
S14	1-762-056-11	SWITCH, KEYBOARD(MANU -)	
**********			
		MISCELLANEOUS	
		**********	
12	1-765-567-11	CORD (WITH CONNECTOR) (including F901,902)	
F901	1-532-422-11	FUSE 6.3A/125V	
F902	1-532-417-11	FUSE 2.0A/125V	
HP901	1-543-976-11	HEAD, MAGNETIC (PLAYBACK)	
M901	3-916-079-01	MOTOR ASSY	
S902	1-572-712-11	SWITCH, SLIDE (FWD/REV)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-765-567-11	CORD (WITH CONNECTOR) (including F901,902)	
	3-758-682-11	MANUAL, INSTRUCTION (ENGLISH/SPANISH/CHINESE)	
	3-758-683-11	MANUAL, INSTRUCTION, INSTALL	
*	3-914-407-11	INDIVIDUAL CARTON	
*	3-914-409-01	CUSHION (UPPER)	
*	3-914-410-01	CUSHION (LOWER)	

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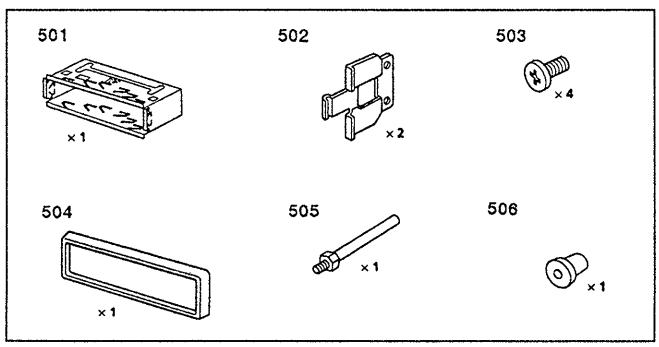
HARDWARE LIST

#1	7-621-770-87	SCREW +PTT 2.6X5 (S)	
#2	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	
#3	7-682-145-01	SCREW +P 3X4	
#4	7-621-773-87	SCREW +PTT 2.6X10 (S)	
#5	7-685-132-19	SCREW +P 2.6X5 TYPE2 NON-SLIT	
#6	7-627-556-08	SCREW +P 2.6X2.8	
#11	7-624-102-04	STOP RING 1.5, TYPE -E	
#12	7-624-104-04	STOP RING 2.0, TYPE -E	
#13	7-621-255-15	SCREW +P 2X3	
#14	7-627-553-38	SCREW,PRECISION +P 2X3	
#15	7-628-253-15	SCREW +PS 2X5	
#16	7-628-253-95	SCREW +PS 2.6X4	

****

MOUNTING HARDWARE



501	X-3368-723-1	FRAME ASSY, FITTING
502	3-913-037-01	SPRING, FITTING
503	3-329-814-01	SCREW (M4X6), SPECIAL PAN (+)
504	3-913-036-01	COLLAR
505	3-386-828-01	SCREW, FITTING
506	3-349-410-01	BUSHING

9-959-553-11

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